

MESSAGE

from the President



Dear Columbus State Student:

Welcome to Columbus State Community College. You have made a smart choice to come to Columbus State to pursue your educational goals.

Whether you are just beginning your academic career or are returning to college to update your skills, your experience here should be a rewarding one. The faculty and staff at Columbus State are dedicated to providing you with the best educational preparation possible. Many of our faculty and staff are recognized both statewide and nationally for their professional expertise. Our classes are small, and students receive personal attention from faculty, making for a very nurturing learning environment.

As a community college, we are dedicated to providing access to higher education to everyone in our community. We also work hard to meet the job-training needs and workplace skills demanded by employers in central Ohio.

Columbus State stands ready to help you—and every student—learn for the present and learn for a lifetime. I hope you take full advantage of everything this exceptional college community has to offer.

Sincerely,

A handwritten signature in black ink that reads "M. Valeriana Moeller". The signature is written in a cursive, flowing style.

Val Moeller
President

Campus Directory

Department	Location	Phone
Academic Health Records	UN 134A	287-2450
Admissions (Welcome Center)	MA 101	287-2669
Advising Services	AQ 116	287-2668
Arts and Sciences Division	NH 425	287-2512
Bookstore: Discovery Exchange	DX	287-2427
Business and Industry Training	WD 317	287-5000
Cafeteria	DE	287-2483
Cashier's Office/Fees	RH 2 nd Floor	287-2414
Campus Tours	MA 101	287-2669
Career Placement Center (Acloché)	NH 119	287-5279
Career Services (Advising)	AQ 116	287-5327
Child Development Center	CDC	287-3600
Community Educ./Workforce Dev.	WD 1090	287-5858
Community Outreach	FR 132	287-5433
COMPASS Placement Testing Lab	MA 255	287-3602
Continuing Professional Education	WD 346	287-5997
Copy Center/Print Shop	DX Lower Level	287-5652
Counseling Services	AQ 116	287-5416
Delaware Center	DC	(740) 369-3890
Developmental Education	AQ 215	287-5193
Disability Services	FR 223	287-2570
Discovery Exchange Bookstore	DX	287-2427
Distance Learning/Global Campus	DH 241	287-5991
Diversity/Study Abroad/TRiO Programs	EB 201	287-5648
Dublin Center	DB	287-7050
Educational Resources Center (Library)	ERC	287-2465
Financial Aid	RH Ground Fl.	287-2648
GED	WD 1090	287-5858
Gahanna Center	GH	476-4711
Human Resources	RH 115	287-2408
Intramural Sports	DE 134	287-5348
K-12 Initiatives	SX	287-5961
Knowledge Research and Planning	FR 122	287-3837
Language Institute	WD 1108	287-5448
Library (Educational Resource Center)	ERC	287-2465
Marysville Center	ML	(937) 644-1616
Off-Campus Programs	DE 103	287-2696
Parking and ID	UN 048	287-2525
Pickaway Center (Teays Valley H.S.)	PC	(740) 983-5086
Public Safety	UN 048	287-2525
Records and Registration	MA 201	287-5353
Recreational Facilities	DE 134	287-2445
ROTC		236-6649
Southeast Center	SE	287-7200
Southwest Center (Bolton Field)	AV	287-7102
South-Western Center (Grove City)	GC	801-3385
Student Activities	NH 116	287-2637
Student Athletics	DE 134	287-5092
Teaching Learning Resource Center	DH 241	287-5991
TechLink Program	DE 259	287-5318
Tech Prep/Heart of Ohio Consortium	NH 022	287-2452
Telephone Information Center	TIC	287-5353
Tolles Center	TC	287-2696
Transitional Workforce	WD 1099	287-5397
Tutoring Services	AQ 241	287-2474
Veterans Services	RH 138	287-2644
Welcome Center (Admissions)	MA 101	287-2669
Westerville Center	WV	287-7000

Academic Programs

Arts and Sciences Division	NH 425	287-2512
Biological and Physical Sciences	NH 408	287-2522
Communication Skills	NH 420	287-2531/3630
Developmental Education	AQ 215	287-5193
Humanities	NH 408	287-5043
Mathematics	DH 415	287-5313
Modern Languages	FR 206A	287-5400
Social/Behavioral Sciences	TL 309	287-5005
Technical Communication	NH 420	287-3630/2531

Career and Technical Programs

Accounting	NH 432	287-5420
Applied Technologies	DE 259	287-5211
Appraisal	WD 1099	287-5397
Architecture	DH 205	287-5030
Automotive Technology	DE 259	287-5318
Aviation Maintenance Technology	AV	287-7100
Business Management	DE 240	287-5351
Civil Engineering Technology	DH 205	287-5030
Computer Information Technology	DE 259	287-5376/5009
Construction Management	DH 205	287-5030
Dental Hygiene	UN 410	287-5215
Dental Laboratory Technology/ Small Business Management	UN 433	287-2521
Digital Design and Graphics	EB 401	287-5010
Digital Photography	EB 401	287-3697
Early Childhood Development	UN 219	287-2540
Electro-Mech. Engineering Technology	EB 312	287-5350
Electronic Engineering Technology	EB 312	287-5350
Emergency Medical Serv. Technology	GA 001	287-3812
EMS/Fire Science	GA 001	287-3812
Environmental Science, Safety & Health	DH 205	287-5030
Finance	NH 432	287-5420
Fire Science	GA 001	287-3812
Geographic Information Systems	DH 205	287-5030
Health Information Mgmt. Technology	UN 307	287-5382
Heating, Ventilating & A/C Technology	UN 134B	287-2657
Hospitality Management	EB 001	287-5126
Human Resources Mgmt. Technology	DE 240	287-5351
Interactive Media	EB 401	287-5010
Interpreting/Amer. Sign Language Edu.	UN 219	287-2540
Landscape Design/Build	DH 205	287-5030
Law Enforcement	FR 206B	287-2591
Marketing	EB 401	287-5010
Massage Therapy	UN 307	287-5382
Mechanical Engineering Technology	EB 312	287-5350
Medical Assisting	UN 407	287-2521
Medical Laboratory Technology	UN 307	287-5382
Mental Health/Chemical Dependency/ Mental Retardation	UN 219	287-2540
Multi-Competency Health	UN 507	287-2506/2606
Nuclear Medicine Technology	GR 389	287-5215
Nursing	UN 507	287-2506
Office Administration	DE 259	287-5009/5351
Paralegal Studies	FR 206B	287-2591
Quality Assurance Technology	EB 312	287-5350
Radiography	GR 111	287-5215
Real Estate	WD 1099	287-5397
Respiratory Care	UN 407	287-2521
Sport and Exercise Studies	UN 307	287-5382
Supply Chain Management	EB 401	287-5175
Surgical Technology	UN 507	287-2506/2606
Veterinary Technology	VT 102	287-5511

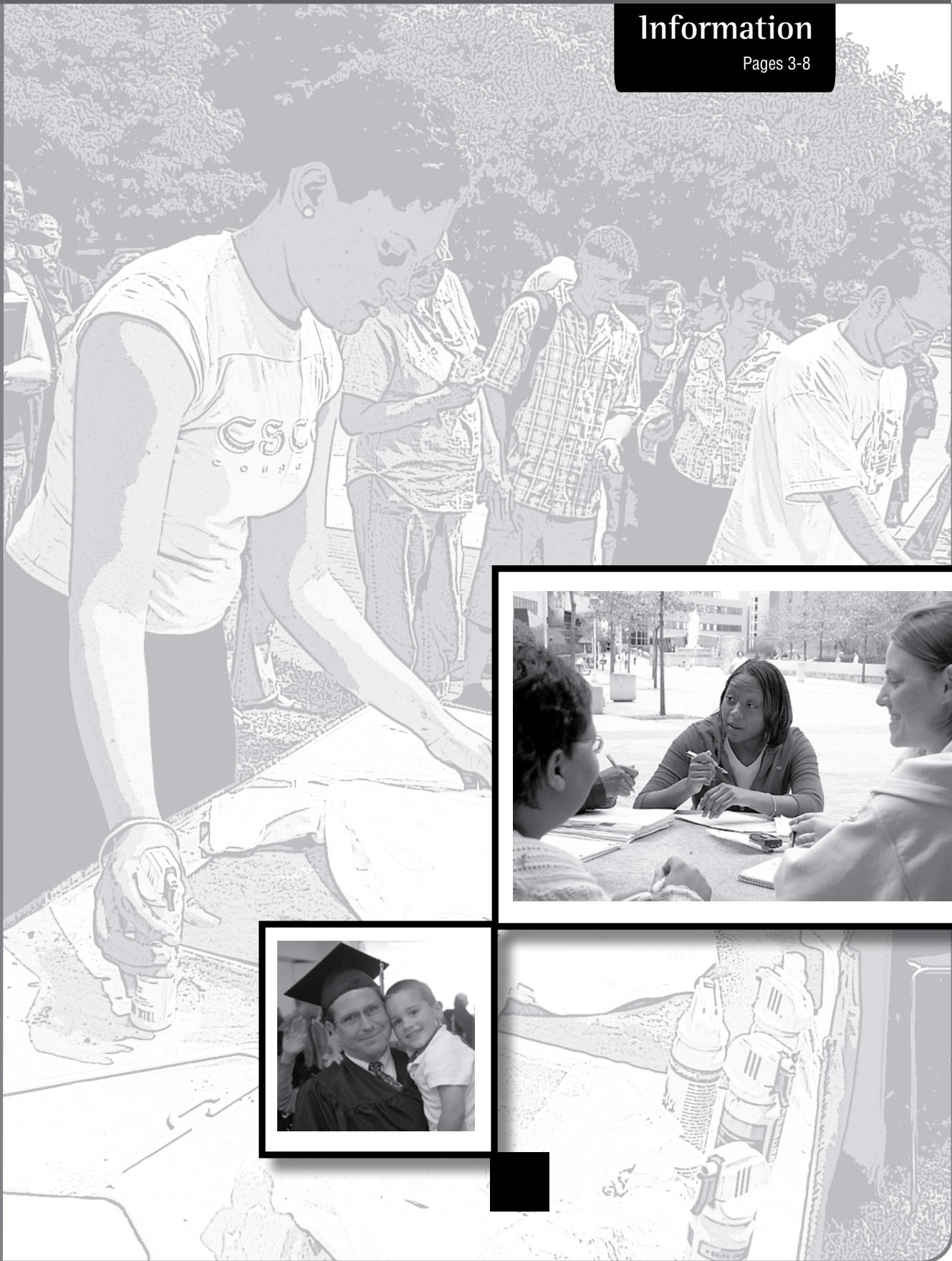
Building Codes:

AQ..... Aquinas Hall	EB Eibling Hall	ML..... Marysville Center	TC Tolles Center
CDC..... Child Dev. Center	FR..... Franklin Hall	NH..... Nestor Hall	TL..... Center for Technology & Learning
CO..... Columbus Hall	GA..... 375 N. Grant Ave.	PC..... Pickaway Center (Teays Valley H.S.)	UN..... Union Hall
CT..... 339 Cleveland Ave.	GC..... South-Western Center (Grove City)	PG..... Parking Garage	VT 384 N. 6th St.
DB..... Dublin Center	GH..... Gahanna Center	RH..... Rhodes Hall	WD..... Center for Workforce Development
DC..... Delaware Center	GR..... 389 N. Grant Ave	SE..... Southeast Center	WV..... Westerville Center
DE..... Delaware Hall	MA..... Madison Hall	SW..... Southwest Center (Bolton Field)	
DH..... Davidson Hall		SX..... 366/370 6th St.	
DX..... Discovery Exchange Bookstore			

GENERAL

Information

Pages 3-8



Academic Calendar

Summer Quarter 2007 June 25, 2007 – September 8, 2007

Autumn Quarter 2007 September 19, 2007 – December 8, 2007

April 23, 2007 (M)..... Summer Quarter registration begins
 May 28, 2007 (M)..... Readmission deadline for Academic Dismissal and Academic Review-SU07
 June 25, 2007 (M)..... *8-week term classes begin
 June 25, 2007 (M)..... *First 4-week term classes begin
 June 25, 2007 (M)..... *First-term classes begin
 June 25, 2007 (M)..... *Full-quarter classes begin
 July 4, 2007 (W) Independence Day – Campus closed
 July 16, 2007 (M)..... Last day to drop from first 4-week term classes
 July 22, 2007 (SU)..... First 4-week term classes end
 July 23, 2007 (M)..... *Second 4-week term classes begin
 July 26, 2007 (TH)..... Last day to drop from first-term classes
 August 1, 2007 (W)..... First-term classes end
 August 2, 2007 (TH)..... *Second-term classes begin
 August 3, 2007 (F)..... Petition to graduate Autumn Quarter 2007 due in Records and Registration
 August 4, 2007 (S)..... Last day to remove Incompletes (I) incurred Spring Quarter 2007
 August 13, 2007 (M)..... Last day to drop from 8-week term classes
 August 13, 2007 (M)..... Last day to drop from second 4-week term classes
 August 19, 2007 (SU) Second 4-week term and 8-week term classes end
 August 20, 2007 (M)..... Readmission deadline for Academic Dismissal and Academic Review-AU07
 August 27, 2007 (M)..... Last day to drop from full-quarter classes
 August 27, 2007 (M)..... Last day to drop from second-term classes
 September 3, 2007 (M) Labor Day – Campus closed
 September 7, 2007 (F)..... Graduation ceremony
 September 8, 2007 (S)..... Summer Quarter 2007 ends

July 23, 2006 (M)..... Autumn Quarter registration begins
 August 20, 2007 (M)..... Readmission deadline for Academic Dismissal and Academic Review-AU07
 September 19, 2007 (W) *8-week term classes begin
 September 19, 2007 (W) *First 4-week term classes begin
 September 19, 2007 (W) *First-term classes begin
 September 19, 2007 (W) *Full-quarter classes begin
 October 8, 2007 (M) Columbus Day – Campus closed
 October 10, 2007 (W) Last day to drop from first 4-week term classes
 October 16, 2007 (T)..... First 4-week term classes end
 October 17, 2007 (W) *Second 4-week term classes begin
 October 20, 2007 (S)..... Last day to drop from first-term classes
 October 24, 2007 (W) In-Service Day – Offices closed, no day classes
 October 25, 2007 (TH)..... Last day to remove Incompletes (I) incurred Summer Quarter 2007
 October 27, 2007 (S)..... First-term classes end
 October 29, 2007 (M) *Second-term classes begin
 November 6, 2007 (T)..... Last day to drop from Eight-week term classes
 November 6, 2007 (T)..... Last day to drop from second 4-week term classes
 November 12, 2007 (M) Veterans Day – Campus closed
 November 13, 2007 (T)..... Second 4-week term and 8-week term classes end
 November 20, 2007 (T)..... Last day to drop from full-quarter classes
 November 22-25, 2007 Thanksgiving Holiday – Campus closed (TH, F, S, SU)
 November 20, 2007 (TH)..... Last day to drop from second-term classes
 December 6, 2007 (TH) Readmission deadline for Academic Dismissal and Academic Review-WI08
 December 7, 2007 (F) Petition to graduate Winter Quarter 2008 due in Records and Registration
 December 7, 2007 (F) Graduation ceremony
 December 8, 2007 (S) Autumn Quarter 2007 ends

*Please refer to the college Web site www.csc.edu for additional detailed information.
 Note the Financial Aid deadline dates.*

*Instructor signature required to add a course after the term begins.

Note: Tuition refunds are based upon the percentage of time elapsed in each course. If the course is dropped within 10% of the time elapsed in the course, a 100% tuition refund will be issued. If the course is dropped within 20% of the time elapsed in the course, a 50% tuition refund will be issued. If the course is dropped within 30% of the time elapsed in the course, a 25% tuition refund will be issued.

Note: A course must be dropped before 10% of the course has elapsed in order to avoid a “W” appearing on the academic transcript.

Columbus State Community College reserves the right to change this calendar as necessary.

Winter Quarter 2008
January 7, 2008 – March 22, 2008

Spring Quarter 2008
March 31, 2008 – June 14, 2008

October 22, 2007 (M) Winter Quarter registration begins
 December 6, 2007 (TH) Readmission deadline for Academic Dismissal and Academic Review-WI08
 December 25, 2007 (T) Christmas Day – Campus closed
 January 1, 2008 (M) New Year’s Day – Campus closed
 January 7, 2008 (M) *8-week term classes begin
 January 7, 2008 (M) *First 4-week term classes begin
 January 7, 2008 (M) *First-term classes begin
 January 7, 2008 (M) *Full-quarter classes begin
 January 21, 2008 (M) Dr. Martin Luther King Jr. Day– Campus closed
 January 28, 2008 (M) Last day to drop from first 4-week term classes
 February 1, 2008 (F) Petition to graduate Spring Quarter 2008 due in Records and Registration
 February 3, 2008 (SU) First 4-week term classes end
 February 4, 2008 (M) *Second 4-week term classes begin
 February 7, 2008 (TH) Last day to drop from first-term classes
 February 9, 2008 (S) Last day to remove Incompletes (I) incurred Autumn Quarter 2007
 February 13, 2008 (W) First-term classes end
 February 14, 2008 (TH) *Second-term classes begin
 February 22, 2008 (F) Presidents Day – Campus closed
 February 25, 2008 (M) Last day to drop from 8-week term classes
 February 25, 2008 (M) Last day to drop from second 4-week term classes
 March 2, 2008 (SU) Second 4-week term and 8-week term classes end
 March 3, 2008 (M) Readmission deadline for Academic Dismissal and Academic Review–SP 08
 March 10, 2008 (M) Last day to drop from full-quarter classes
 March 10, 2008 (M) Last day to drop from second-term classes
 March 21, 2008 (F) Graduation ceremony
 March 12, 2008 (S) Winter Quarter 2008 ends

February 4, 2008 (M) Spring Quarter 2008 registration begins
 March 3, 2008 (M) Readmission deadline for Academic Dismissal and Academic Review–SP 08
 March 23, 2008 (SU) Easter Sunday – Campus closed
 March 31, 2008 (M) *8-week term classes begin
 March 31, 2008 (M) *First 4-week term classes begin
 March 31, 2008 (M) *First-term classes begin
 March 31, 2008 (M) *Full-quarter classes begin
 April 21, 2008 (M) Last day to drop from first 4-week term classes
 April 25, 2008 (F) In-Service Day – Offices closed, no day classes
 April 27, 2008 (SU) First 4-week term classes end
 April 28, 2008 (M) *Second 4-week term classes begin
 May 1, 2008 (TH) Last day to drop from first-term classes
 May 2, 2008 (F) Petition to graduate Summer Quarter 2008 due in Records and Registration
 May 7, 2008 (W) First-term classes end
 May 8, 2008 (TH) *Second-term classes begin
 May 10, 2008 (S) Last day to remove Incompletes (I) incurred Winter Quarter 2008
 May 19, 2008 (M) Last day to drop from 8-week term classes
 May 19, 2008 (M) Last day to drop from second 4-week term classes
 May 25, 2008 (SU) Second 4-week term and 8-week term classes end
 May 26, 2008 (M) Memorial Day – Campus closed
 June 2, 2008 (M) Last day to drop from full-quarter classes
 June 2, 2008 (M) Last day to drop from second-term classes
 June 2, 2008 (M) Readmission deadline for Academic Dismissal and Academic Review–SU 08
 June 13, 2008 (F) Graduation ceremony
 June 14, 2008 (S) Spring Quarter 2008 ends

*Please refer to the college Web site www.csc.edu for additional detailed information.
 Note the Financial Aid deadline dates.*

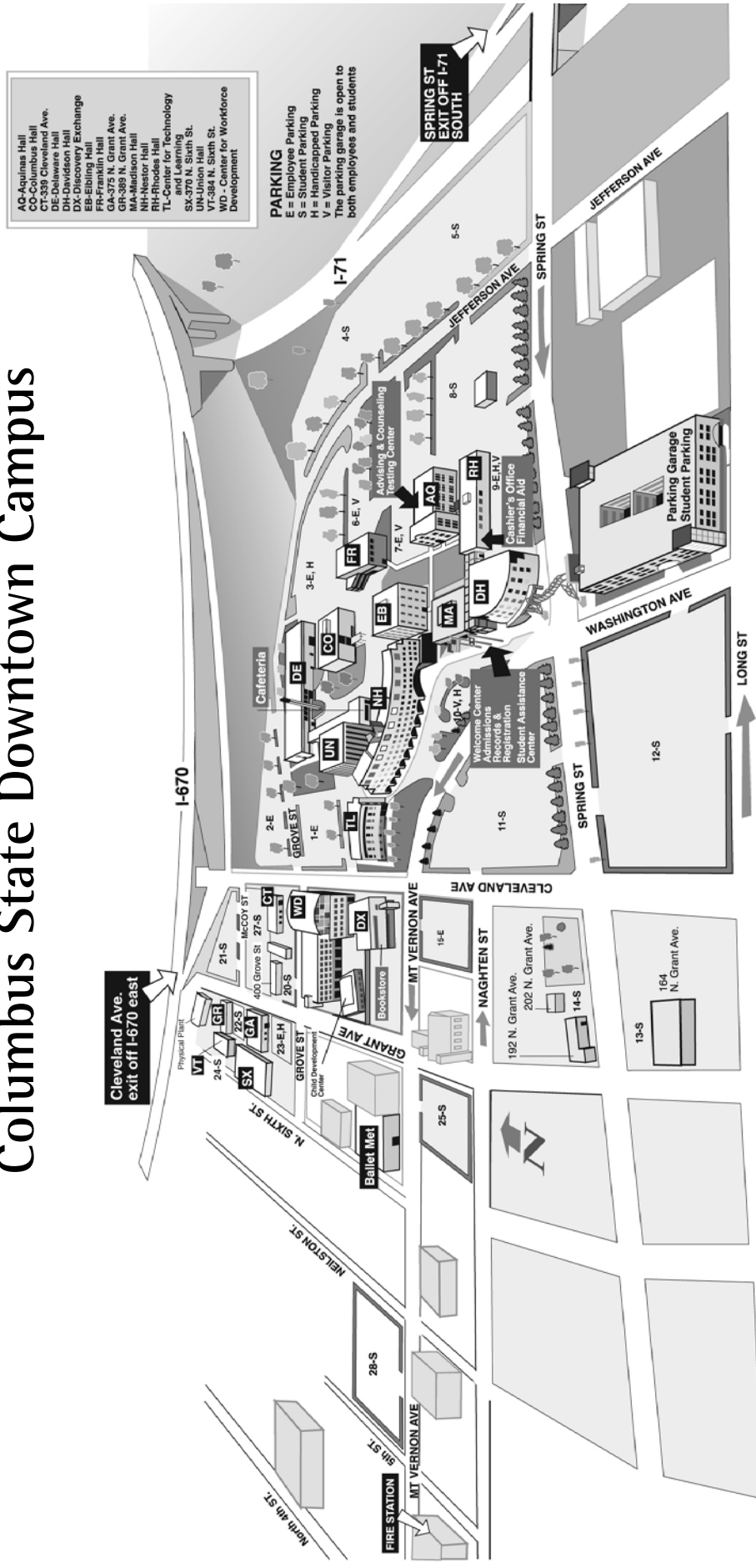
*Instructor signature required to add a course after the term begins.

Note: Tuition refunds are based upon the percentage of time elapsed in each course. If the course is dropped within 10% of the time elapsed in the course, a 100% tuition refund will be issued. If the course is dropped within 20% of the time elapsed in the course, a 50% tuition refund will be issued. If the course is dropped within 30% of the time elapsed in the course, a 25% tuition refund will be issued.

Note: A course must be dropped before 10% of the course has elapsed in order to avoid a “W” appearing on the academic transcript.

Columbus State Community College reserves the right to change this calendar as necessary.

Columbus State Downtown Campus



Columbus State in Brief

For more than 40 years, Columbus State Community College has been meeting the diverse educational needs of the community and is proud to be an important contributor to the growth and progress of Columbus and central Ohio.

In 1963, the Columbus Board of Education created the Columbus Area Technician School, and the Board designated an area of Central High School to house this new school for two-year, post-secondary technical programs.

Rapid growth in enrollment during the initial two years caused the Board of Education to purchase the Columbus Aquinas Parochial High School property and move the Technician School to a permanent campus. On May 25, 1965, the Ohio Board of Regents gave approval to a proposal from the Columbus Board of Education to create the Columbus Technical Institute District, and the Columbus Technical Institute was granted a charter effective July 1, 1967.

As a state-assisted college, Columbus Technical Institute provided technical programs that prepared students for immediate employment. From the first graduating class in 1965 through today, more than 30,000 students have earned associate degrees in more than 50 technical fields and transfer programs. The success of the College is reflected in the many accomplishments of these graduates and the many other students who have completed courses to improve and enhance their skills.

On July 1, 1987, Columbus Technical Institute was rechartered as Columbus State Community College by action of the Ohio Board of Regents. This significant change was a result of careful study of the educational needs of Columbus and central Ohio. The resulting findings supported the establishment of a comprehensive community college to provide additional educational opportunities to area residents.

As a comprehensive community college, Columbus State has a strong commitment to technical education, offering the Associate of Applied Science and the Associate of Technical Studies degree programs in business, health, human service, public service, and engineering technologies to prepare graduates for immediate employment. The transfer programs, Associate of Arts and Associate of Science, meet the majority of freshman and sophomore course requirements of bachelor's degree programs offered by four-year colleges and universities throughout the state. Specific transfer agreements with area colleges and universities have also been developed.

In addition to courses offered on the Downtown Campus, classes are offered at 10 off-campus locations throughout central Ohio. The College's Division of Community Education and Workforce Development also offers customized training programs for local employers on campus or at the business site.

Columbus State's Downtown Campus is centrally located on approximately 80 acres near downtown Columbus. The campus currently has more than 20 buildings that house classrooms, laboratories, and offices of the College. Also part of the College's

Downtown Campus is the Educational Resources Center, which provides materials and resources for students. In addition to the main campus, the College operates a facility for Aviation Maintenance Technology at Bolton Field Airport.

Columbus State Community College serves Franklin, Delaware, Madison, and Union Counties. A nine-member Board of Trustees is appointed by the Governor. Columbus State is accredited by the North Central Association of Colleges and Schools, and many of the College's degree programs are accredited by professional associations and agencies.

Campus Tours

Campus tours for individuals and groups can be arranged by contacting the Admissions Office, located in the lower level of Madison Hall, (614)-287-2446 (information line). Please call ahead to make a reservation or view reservation information online at www.csc.edu by clicking the "Prospective Students" and "Tours" links.

Admissions

New students are invited to begin the enrollment process in the Admissions Office, located on the lower level of Madison Hall. International Student Admissions is also located in this area. Admissions Advisors assist new students with the application process and provide information on programs of study and next steps for enrollment, including new student orientation, placement testing, and applying for financial aid. Admissions Advisors also provide information about the many services and resources available to help students succeed at Columbus State and the wide variety of opportunities to get involved in campus activities and organizations. For more information, contact the Admissions Office at (614) 287-2669 or view our online resources at www.csc.edu (click on the "Prospective Students" link.)

Downtown Campus

Columbus State Community College
550 East Spring Street
Columbus, Ohio 43215
Phone: (614)-287-5353.

Off-Campus Programs

Susan Norris-Berry, Director

(614) 287-5083

Columbus State's off-campus centers, located throughout the college's four-county service district and in Pickaway County, provide educational opportunities for more than 14,000 students each year with day, evening and weekend classes. Suburban centers offer courses in general education, computer skills and technical areas, and most are equipped for telecourse and distance learning delivery. In addition, the Associate of Arts and the Associate of Applied Science degree in Business Management are available at the Dublin and Westerville centers. Academic Advising, COMPASS testing, Distance Learning testing, and other academic support services are provided at some off-campus centers. Students may also pay fees (credit card payments only) at the Dublin, Southeast and Westerville centers during designated hours; please contact these centers for current hours. A year-round schedule of classes is published annually that allows students to plan their educational programs several quarters in advance.

1 **Delaware Center**
Delaware Area Career Center,
North Campus
State Route 521
Delaware, Ohio 43015
Phone: (740) 369-3890
Hours: M-R 5 – 10:30 p.m.

2 **Dublin Center**
6190 Shamrock Court
Dublin, Ohio 43016
Hours: M – F, 8 a.m. – 10:30 p.m.
Sat: 8 a.m. – 4 p.m., Sun: 1 – 5 p.m.
Phone: (614) 287-7050 Fax: (614) 761-1531

3 **Gahanna Center**
445 Havens Corner Road
Gahanna, Ohio 43230
Hours: M – R, 4:30 p.m. – 10:30 p.m.
Sat: 8 a.m. – 4 p.m.
Phone: (614) 476-4711 Fax: (614) 476-4764

4 **Marysville Center**
800 Amrine Mill Road
Marysville, Ohio 43040
Hours: M – R, 5 p.m. – 8 p.m.
Phone: (937) 644-1616
Fax: (937) 644-1663

5 **Pickaway Center**
Teays Valley High School
3887 State Route 752
Ashville, Ohio 43103
Phone: (740) 983-5086

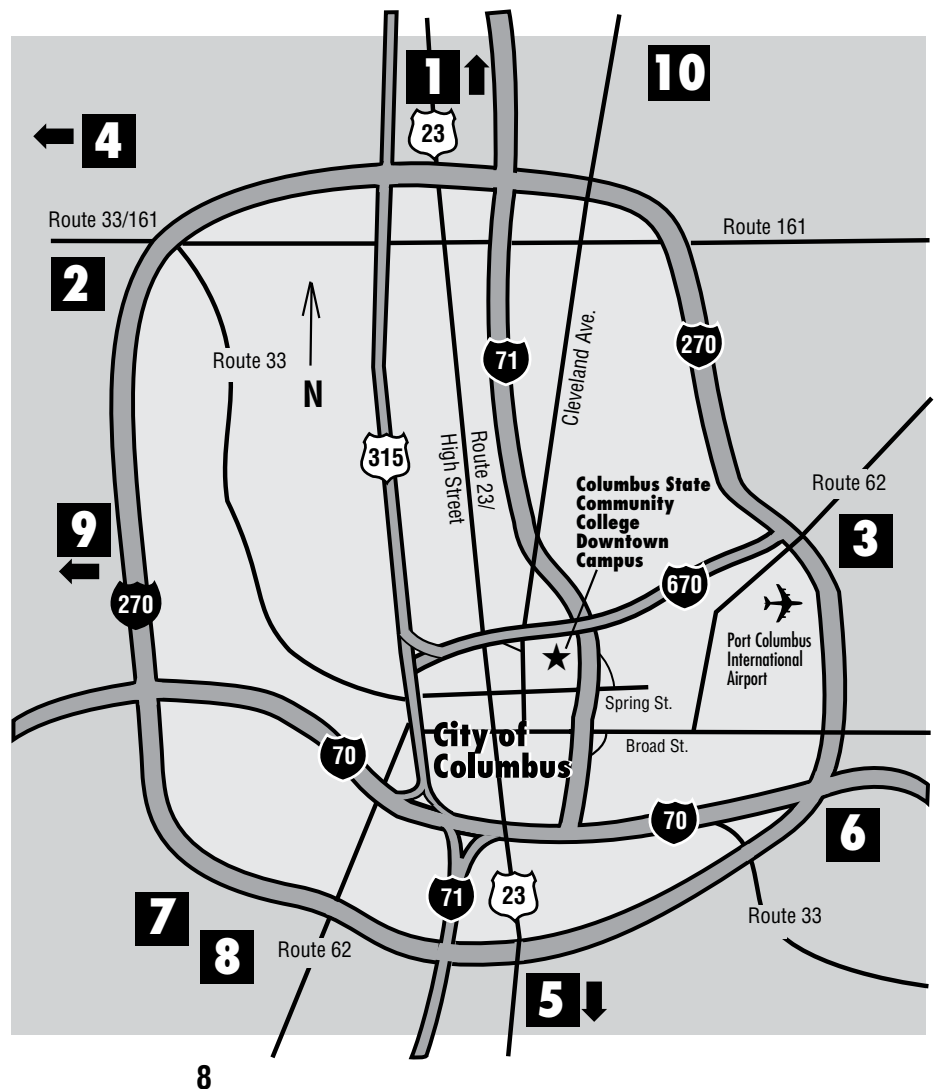
6 **Southeast Center**
4449 Professional Parkway
Groveport, Ohio 43125
Hours: M – F, 8 a.m. – 10:30 p.m.
Sat: 8 a.m. – 4 p.m., Sun: 1 – 5 p.m.
Phone: (614) 287-7200
Fax: (614) 836-9127

7 **Southwest Center at Bolton Field**
5355 Alkire Road
Columbus, Ohio 43228
Hours: M – F, 5 p.m.–10:30 p.m.
Sat: 9 a.m. - Noon
Phone: (614) 287-7102
Fax: (614) 878-0729

8 **South-Western Center at Grove City**
4750 Big Run South Road
Grove City, Ohio 43123
Hours: M – R, 5:30 p.m. – 10:30 p.m.
Phone: (614) 801-3485
Fax: (614) 801-3486

9 **Tolles Center**
7877 US Highway 42 South
Plain City, Ohio 43064
(614) 873-4666 ext. 298

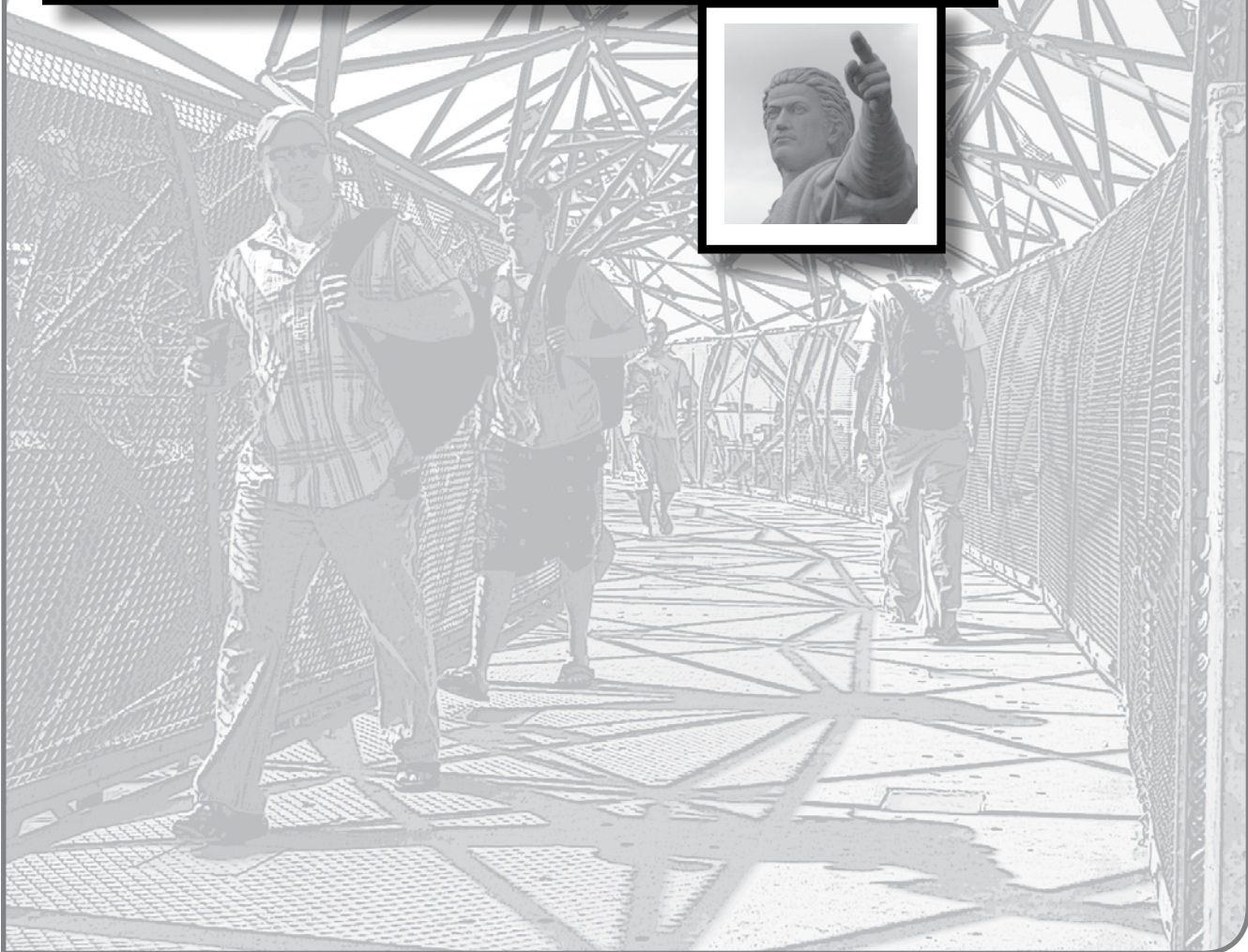
10 **Westerville Center**
7233 Northgate Way and
7207 Northgate Way
Westerville, Ohio 43082
Hours: M – F, 8 a.m. – 10:30 p.m.
Sat: 8 a.m. – 4 p.m., Sun: 1 – 5 p.m.
Phone: (614) 287-7000 or 287-7020
Fax: (614) 287-7002



ENROLLMENT

Services

Pages 9-18



Enrollment Services

Admission Policy

Columbus State Community College is committed to the principle of providing each student access to quality educational programs and lifelong learning. An application for admission is required for all applicants pursuing enrollment in academic credit courses. This application is not required for students enrolled exclusively in noncredit courses. Information provided on the Columbus State Community College admissions application is used to determine initial admission status. Additional documentation is required for certain applicant categories, such as international, felony, underage, and transfer students. Specific information about each category is maintained in the Admissions Office. Applicants not meeting established procedures will be denied admission. Admission procedures, including changes in conditions of admission status, will be adopted and implemented by the College.

Admission to a specific program of study for the purpose of earning a degree or certificate shall be according to requirements and procedures established for the specific program of study and adopted by the College. Admission to the College does not ensure admission to a particular program of study. Many technologies, including Nursing, have established additional requirements that must be fulfilled prior to acceptance. All prospective applicants are encouraged to contact the Admissions Office for specific information.

To be eligible for financial assistance, applicants who are not high school/home school graduates and do not have their GED (General Education Diploma), must demonstrate the ability to benefit from college programs by achieving the required scores on the College's placement test. For some students, prerequisite coursework in science, reading, mathematics and English may be needed prior to enrolling in certain courses and programs. While most degree programs can be completed in two years of full-time study, it may take longer for some students, including those who need developmental courses and those attending on a part-time basis.

For more information, contact the Admissions Office in the lower level of Madison Hall, (614) 287-2669. See below for additional application and enrollment procedures.

Application/Enrollment Procedures

For additional information, view the "Prospective Students" link on the CSCC Web site at www.csc.edu.

High School Transcript /GED scores

If required for admission to their chosen program of study, students should submit a final official copy of their high school transcript and/or an official copy of their G.E.D. scores. Please check the Specific Program Admissions Information in the Programs of Study section of this catalog to determine if your high school

transcript/GED scores are required for admission to a particular program of study.

The official high school transcript and/or copy of official GED scores should be mailed to Columbus State Community College, Records and Registration Department, 550 East Spring St., P. O. Box 1609, Columbus, Ohio 43216-1609. All information submitted to the College relative to admission and academic status becomes and remains the property of the College.

Previous College Transcript

An official college transcript is requested of applicants who have attended other colleges or universities. An official transcript from each college attended is required of all who are seeking transfer credit or who have completed prerequisite coursework at another institution. An official transcript is one that is in a sealed envelope bearing the other institution's official letterhead and/or logo; is printed on official, secure paper that has been signed and sealed by the other college or university; and has not been opened prior to being submitted to Columbus State Community College. The transcript should be mailed from the other college(s) to Columbus State Community College, Records and Registration Department, 550 East Spring St., P. O. Box 1609, Columbus, Ohio 43216-1609. All student education record information, documentation and material submitted to Columbus State Community College, including official transcripts from other colleges and universities, becomes and remains the property of the College.

Identification Number

An identification number is assigned to each student upon admission to the College. Social Security Numbers are not used as identifiers for student records. Student determined passwords allow access to CougarWeb functions.

(Please refer to the statement on Family Educational Rights and Privacy Act found on pages 30-32 for information on the release of student records.)

Applicants who are transferring to Columbus State from another college and applicants who are transient students (students attending another college who plan to enroll at Columbus State for one or two quarters and transfer the credits back to the other college):

- Complete the application for admission. Students dismissed from another institution may be required to submit additional documentation to determine their admission status and conditions of enrollment at Columbus State Community College.
- Submit high school and college transcripts as indicated above. Obtain a copy of your transcript or other documentation of completed courses to bring with you when talking with advisors to assist them in recommending appropriate courses and next steps.

- Complete New Student Orientation.
- Complete placement tests. Students with transfer credit in college-level composition and algebra may not need to complete the entire placement test.
- Talk with an academic advisor to review your test results, explore programs, and select appropriate courses to schedule. Contact Advising Services in 116 Aquinas Hall, (614) 287-2668, for an appointment.

Applicants who are high school students interested in the Post Secondary Enrollment Options (PSEO) program (concurrent enrollment in college classes while still in high school):

- Complete the application for admission.
- A Post Secondary Enrollment Options program (PSEO) packet is available online at [http://csc.edu/USE/PDF-forms/PSEOP Application 06-07.pdf](http://csc.edu/USE/PDF-forms/PSEOP%20Application%2006-07.pdf). Complete the student section and submit the application to your high school counselor. The high school counselor will complete the rest of the PSEO application and will send it to Columbus State Community College K-12 Initiatives Office, Attn: PSEO, with the high school transcript.
- Students meeting preliminary criteria must complete placement testing.
- Students meeting the placement test score requirements and additional entrance requirements will be offered admission into the PSEO program, and must attend a PSEO orientation session.
- Talk with an academic advisor to review your test results, explore programs, and select appropriate courses to schedule.
- Contact the K-12 Initiatives Office at 614-287-5961 to speak with an Underage Enrollment Advisor about the PSEO program or self-pay options for underage students at Columbus State.

Applicants who are Immigrants (Refugees, Permanent Residents, Asylees):

- Complete the application for admission.
- Attach a photocopy of the documentation verifying immigration status to the application.
- Submit original or certified photocopies of secondary school records showing graduation in original language and translated into English, if required for admission to your chosen program of study.
- Complete English as a Second Language or COMPASS placement test (as appropriate). Students with transfer credit in college-level English composition and algebra may not need to complete the entire placement test.
- Complete New Student Orientation
- Talk with an academic advisor to review your test results, explore programs, and select appropriate courses to schedule.

Applicants who are Non-Immigrants (Visa holders other than F-1 status):

- All required documents must be received in the International Enrollment Services Office by the following

dates:

- Spring Quarter: February 15
- Summer Quarter: May 15
- Autumn Quarter: August 15
- Winter Quarter: November 15
- Complete the Non-Immigrant International Student application (obtained from the International Admissions Office).
- Submit photocopies of both sides of your I-94 card and the visa stamp page in your passport.
- Submit original or certified photocopies of secondary school records showing graduation in original language and translated into English, if required for admission to your chosen program of study.
- Complete English as a Second Language or COMPASS placement test (as appropriate). Students with transfer credit in college-level English composition and algebra may not need to complete the entire placement test.
- Complete New Student Orientation.
- Talk with an academic advisor to review your test results, explore programs, and select appropriate courses to schedule.

Additional documents may be requested by Columbus State before final admission is granted.

Applicants who are F-1 Status Visa Holders (International Applicants):

- All required documents must be received in the International Enrollment Services Office by the following dates:

F-1 applicants applying from abroad

- Spring Quarter: December 15
- Summer Quarter: March 15
- Autumn Quarter: June 15
- Winter Quarter: September 15

F-1 applicants applying from within the U.S.

- Spring Quarter: February 15
- Summer Quarter: May 15
- Autumn Quarter: August 15
- Winter Quarter: November 15
- Complete the Non-Immigrant/International Student application for admission.
- Submit original official high school transcript verifying graduation (high school diploma, examination results, etc., should be submitted with the transcript). You must also submit a copy translated into English if the document is not written in English.
- Submit original or certified photocopies of college or university records in original language and translated into English.
- Applicants coming from abroad, for whom English is not their native language, should submit a non-institutional Test of English as a Foreign Language (TOEFL) score of 157 or higher (computer based), 54 or higher (Internet based), or 480 or higher (written) or a non-institutional Michigan English Language Assessment Battery (MELAB) score of 78 or higher. The test results should be

no more than two years old. If you are already in the U.S., you may complete Columbus State's ESL placement test. If you have completed a college level, non-ESL English course at another U.S. college, the TOEFL and MELAB requirement may be waived.

- Sponsor(s) must submit an affidavit of support and current bank statement showing sufficient funds to cover at least one-year's cost of attending Columbus State Community College. The prospective student must complete and submit the financial statement form found in the application.
- Complete New Student Orientation.
- Talk with an academic advisor to review your test results, explore programs, and select appropriate courses to schedule.

F-1 Transient Student Applicants:

- All required documents must be received in the International Enrollment Services Office by the following dates:
 - Spring Quarter: March 1
 - Summer Quarter: June 1
 - Autumn Quarter: September 1
 - Winter Quarter: December 1
- Complete the Non-Immigrant/International Student application for admission.
- Submit photocopies of the following documents: both sides of your I-94 card, picture page of your visa stamp, front and back of your I-20 from the college you attend full-time, your transcript showing completion of college level, non-ESL English at your current college **or** a copy of your non-institutional TOEFL score of at least 157 (computer), 54 (internet based) or 480 (written) or MELAB score of at least 78.
- Submit the International Student Advisor Report completed by your advisor at your home school. (Continuing F-1 transient students must submit this form every quarter).
- Complete New Student Orientation.
- Talk with an academic advisor to review your test results, explore programs, and select appropriate courses to schedule.

Felony Reporting

All applicants to the College and all current and returning students must report any unexpunged felony convictions to the Admissions Office in the lower level of Madison Hall. Documentation, including an arrest record, personal statement, and letter of reference, will be required to determine admission and enrollment status and conditions of enrollment. An Admissions Review Committee will review the information and will notify students in writing of their next steps. Depending on their situation, they may be granted regular admission and enrollment status, or may be required to appear before the Committee for a personal interview to determine their status and conditions of enrollment. They will remain in a pending admission and enrollment status until the review process is complete. Contact the Admissions Office for more information.

Returning Students

Students who have not taken classes at Columbus State for more than two years, and would like to return to the College, should contact the Records and Registration Department at least one week before the quarter begins to update their academic record. The student should also request that official transcripts from any other college they attended during their absence from Columbus State be forwarded to the Records and Registration Department. An official transcript is one that is in a sealed envelope bearing the other institution's official letterhead and/or logo; is printed on official, secure paper which has been signed and sealed by the other college or university; and has not been opened prior to being submitted to Columbus State Community College.

New Student Orientation

Columbus State offers a variety of options to help new students get oriented to the College and get off to a good start. All new students, including those transferring from another institution, must complete New Student Orientation prior to placement testing, academic advising, and course registration. New Student Orientation includes:

- Getting Started 101 – learn about the key steps in the enrollment process, including what documents are needed, how to apply for financial aid, how to prepare for placement testing, when to meet with an academic advisor, what services and resources are available to help you be successful, and what opportunities Columbus State offers to get involved in activities and organizations. Students are provided access to Getting Started 101 in an online, self-paced format as part of their admissions process. After completing Getting Started 101, students should attend a CougarWeb 101 session, the next step of New Student Orientation (see below.). Several in-person Getting Started 101 sessions are also offered each week in combination with a CougarWeb 101 session. For more information, click on the "Prospective Students" and "Orientation" links at www.csc.edu or contact the Admissions Office in the lower level of Madison Hall, (614) 287-2669.
- CougarWeb 101 – learn how to utilize Columbus State's many online tools and resources in this 30-minute, hands-on, interactive session. Set up your username and password, access your student email, learn how to register for classes and pay your fees online, and more. These sessions are offered several times per day in the Student Assistance Center in Madison Hall 225 or in an online format. Reservations are not needed. For more information and session times, click on the "Prospective Students" and "Orientation" links at www.csc.edu or contact the Student Assistance Center in Madison Hall 225, (614) 287-5538.

Student Assistance Center

The Student Assistance Center located in Madison Hall 225 is a center where student can solve registration, fee payment, and financial aid issues. The services provided in the Student Assistance Center include:

Assisting students with navigating CougarWeb
Conducting Free Application for Federal Student Aid (FAFSA) Workshops
Assisting students with completing various online financial aid processes
Conducting New Student Orientations (See Orientation section for details)
Answering Quick Questions
Resolving Ohio Residency Tuition Adjustments
Resolving Selective Service Number issues

Hours of operation

Monday –Thursday, 8:00 a.m.– 7:30 p.m.
Friday, 9:30 a.m. – 4:30 p.m.
Saturday, 9:00 a. m. – 12:00 p.m.

Writing Center

Communication Skills invites all students to use the Writing Center, located in Franklin 245, Monday–Saturday. Students are encouraged to bring a copy of their composition assignment and pre-writing materials with them. Call (614) 287-5717 to schedule an appointment.

Speech Rehearsal Lab

The Speech Lab offers tutoring to students requiring critiques of their oral presentations. The lab is located in Nestor Hall 017, M-F. Please call (614) 287-5391 for an appointment.

Senior Citizens “Good as Gold” Educational Program

As a community service, Columbus State offers senior citizens who are 60 years old or older the opportunity to enroll in credit courses, tuition free, on a space-available basis. To register for credit courses applicable to an associate degree, senior citizens pay the one-time, non-refundable \$50 matriculation fee, which covers the cost of enrolling at the College, including application and permanent record maintenance, a student identification card, any course lab fees, and the cost of books. (The matriculation fee will appear and be due for payment on the schedule and fee statement for the academic quarter in which the student initially registers for a class, even if the class is dropped or cancelled.)

Senior citizens are also admitted to special courses on a tuition-free, space-available basis once the course is financially self-sup-

ported. Lab fees, books and instructional supplies are assessed to senior citizens as required of other students. Courtesy parking permits are provided at no cost to senior citizens. Student rates to concerts and student activities are available to enrolled senior citizens.

For information regarding programs and services, please call (614) 287-2453 (or 1 [800] 621-6407 if calling long distance).

Health Record

If you are accepted to or take courses in these technologies or programs, you must submit a health record prior to registering for or attending technical classes: Dental Hygiene, Dietetic Technician, Early Childhood Development, Emergency Medical Services Technology, Health Information Management Technology, Histology, Medical Assisting Technology, Medical Laboratory Technology, Multi-Competency Health, Nuclear Medicine, Nursing, Phlebotomy, Radiography, Respiratory Care, Sports and Exercise Studies, Surgical Technology, and Veterinary Technology. A health record form will be provided by your department. Specific requirements vary by technology but could include a physician’s examination, immunizations, and screenings.

Placement Tests

The Testing Center offers the COMPASS Placement Test, which is a computerized assessment for new students used to identify the appropriate starting level for reading, writing and math courses. Developmental education courses may be required to maximize the student’s opportunity for academic and personal success. After students complete the COMPASS test, advisors help them select courses for their first quarter.

Placement testing is required for the following students:

- All students who plan to register for a course with established reading, writing, or math prerequisites.
- All students who register for 12 or more credit hours during their initial quarter at the College.
- All part-time students who will register for their 12th cumulative credit hour.
- All high school students intending to take classes.

Students with transfer credit in college-level composition and algebra from an accredited institution may not need to complete the entire placement test. These students should contact an Academic Advisor in Advising Services (Aquinas Hall, Room 116, 287-2668) for course selection and registration information. Students whose native language is not English should contact the Admissions Office (Madison Hall Lower Level, 287-2669) to take the English as a Second Language Test.

COMPASS testing is done on a walk-in basis; appointments are not needed. A photo ID is required. For more information, contact the Testing Center in Aquinas Hall, Room 002, (614) 287-3602, or visit our Web site at www.csc.edu. Sample test items and resources for review are available on this Web site.

Registering For Classes

Students can register for classes via the Web at www.csc.edu, via CATS (Computer Automated Touchtone System) at (614) 287-2287, with a Telephone Information Center representative at (614) 287-5353, in-person with the Records and Registration Department, or at one of the off-campus centers. Course additions or section changes after the start of the quarter will be permitted only with the instructor's approval. Please check the online schedule or printed Enrollment Guide for pertinent deadlines.

Students who wish to register for 22 or more credit hours in a quarter must have the permission of their academic advisor.

Cross-Registration at Other Institutions

The Higher Education Council of Columbus (HECC) is an association of colleges and universities in Central Ohio established to develop programs that benefit its member institutions and the community at large.

As a service to students, HECC member institutions have approved a system of cross-registration for regularly enrolled, full-time undergraduate students at the following colleges and universities:

Capital University
Central Ohio Technical College
Columbus College of Art and Design
Columbus State Community College
DeVry University
Franklin University
Mount Carmel College of Nursing
Ohio Dominican University
Ohio State University
Otterbein College
Pontifical College Josephinum



Cross-registration is limited to one course per term (Autumn, Winter and/or Spring only), with a maximum of three cross-registered courses during a student's academic experience. The course taken must be an enrichment class to the student's program of study at Columbus State. To participate in cross-registration, a Columbus State Community College student must be in good academic standing and maintain full-time status during the quarter he or she is requesting permission to participate in cross-registration. The course section requested for cross-registration must have space available as determined by the host institution. The Columbus State student does not pay tuition to the host institution but may be charged other enrollment-related fees, such as laboratory or parking fees. A grade for the course taken at a host institution will be posted only on the student's Columbus State transcript.

A Columbus State student interested in cross-registering for a course must obtain approval from their academic advisor and the Office of the Registrar and from the host institution's Registrar. It is the student's responsibility to make certain that the host institution's calendar, course schedule, course content, and credit are compatible with his or her goals and Columbus State Community College requirements. Each institution has established cross-registration deadlines, which must be met to participate.

For more information, please contact the Office of the Registrar.

Selective Service System Registration

Under the provisions of Section 3345.32 of the Ohio Revised Code, a male student born after December 31, 1959, who is at least 18 years of age and who is classified as an Ohio resident for fee purposes by the state-assisted college or university he is attending, is required to be registered with the Selective Service System or be charged a tuition surcharge equal to that charged a non-resident student. You are required to provide your Selective Service number on the Columbus State Community College admissions application if you are between the ages of 18 and 26. If you turn 18 after completing your admissions application, you are required to provide the Selective Service number within 30 days of your 18th birthday to the Records and Registration Department. If you do not submit your Selective Service number you will be billed a surcharge equivalent to the non-resident tuition rates. This surcharge will be billed until the Selective Service number is provided.

Students are exempt from registration with the Selective Service System on the basis of one of the following criteria:

- Female;
- Under 18 years of age;
- 26 years of age or older;
- Currently on active duty in the Armed Forces of the United States. Note: Training in a Reserve or National Guard unit does not constitute active duty;
- A non-immigrant alien lawfully in the United States in accordance with Section 101 (a) (15) of the Immigration and Nationality Act, U.S.C. 1101, as amended; or

- A permanent resident of the Federated States of Micronesia, the Marshall Islands, or the Republic of Palau.

Note that Selective Service System registration compliance must take place before disbursement of any federal financial aid funds, or the Ohio Instructional Grant, or before the institutional section of a Guaranteed Student Loan or PLUS application will be certified.

If you are a male who is within 30 days of becoming 18 years of age or between 18 and 26 years of age and have never applied for a Selective Service number, registration may be processed online at www.sss.gov or through a local post office. You may also contact the Selective Service System at (847) 688-6888 to retrieve your Selective Service number. When you receive your Selective Service number, please report your number to the Telephone Information Center at (614) 287-5353.

Change of Name, Address, Phone Number, Program of Study

Any change in your name, address, phone number, or program of study must be reported to the Records and Registration Department so the academic record may be updated.

Name changes require submission of official documentation such as a marriage certificate, court decree, etc.

Address and phone number changes may be made by calling the Telephone Information Center at (614) 287-5353 as well as in the Records and Registration Department. Each student is responsible for complying with any official communication sent to the last reported address.

Program of study changes may be made in the Records and Registration Department. Students may also call the Telephone Information Center, (614) 287-5353, to change their program of study if the new program of study does not have a separate application procedure, such as many of the health related fields.

Army Reserve Officers Training Corps (ROTC)

Qualified students interested in obtaining an officer's commission in the United States Army, Ohio National Guard, or Army Reserve may enroll in Army ROTC classes through a contracted agreement between Columbus State Community College and the United States Army.

Training consists of a combination of classroom and outdoor instruction. Freshman and sophomore students may enroll in the four-year program consisting of the two-year general military course and the two-year professional officer course. There is no military obligation for students in the first two years of the program.

Students with a minimum of 2.50 cumulative grade point average may apply for Army ROTC scholarships. Applications for scholarships are normally made during the fall term and must be completed by January 30.

Additional information may be obtained by contacting the Program Chairperson for Military Science, (614) 236-7114.

Financial Aid

Financial aid is available in several forms: grants, scholarships, loans, and part-time employment. In general, the amount of assistance that a student may receive depends upon the established financial need of the student. This need is determined through the U.S. Department of Education and is based on the information submitted in the Free Application for Federal Student Aid (FAFSA). Financial aid is to be used for tuition, fees, room, board, books, and commuting expenses. For more information please see the *High Finance* publication, available from the Financial Aid Office, or online at <http://www.csc.edu>.

For all federal financial aid programs, regular admission status to the College and U.S. citizenship or permanent residence status is required. Only those who have declared an intent to pursue a degree and are taking related courses are eligible. Persons with bachelor's degrees are not eligible for grants but may apply for loans and work-study.

Application Procedures

Application materials are available in the Financial Aid Office, Rhodes Hall, Lower Level. Students can apply electronically through the Internet at www.fafsa.ed.gov. Students may also request information by calling (614) 287-2648. You must apply for financial aid each academic year. New FAFSA applications are available each year after January 1. Applications are accepted throughout the academic year. Campus-based funding is awarded on a first-come, first-awarded basis.

To ensure that your financial aid application materials can be processed in a timely fashion, CSCC has established priority deadlines for completing the appropriate application materials. These dates are available on the Financial Aid wWeb page at www.csc.edu.

How Do I Apply?

1. Make application for admission to Columbus State Community College.
2. Complete the Free Application for Federal Student Aid (FAFSA) paper application or apply online at www.fafsa.ed.gov. Computers can be used in the Student Assistance Center or in any computer lab at CSCC.
 - a. Be sure to list Columbus State as the school you plan to attend by denoting **school code 006867** in step 6 of the FAFSA.
 - b. If you are applying online, be sure to print the signature page. You will need to sign it and mail it to the address listed on the signature page. If you have previously submitted a FAFSA online, you may use

the PIN assigned to you from the U.S. Department of Education to sign the application.

- c. If you are a first-time FAFSA filer and have not yet been assigned a PIN from the U. S. Department of Education, you may request one in advance to use when completing the on-line FAFSA. You may register on-line at www.pin.ed.gov/
3. After your FAFSA has been received and processed, you will receive a Student Aid Report (SAR) in approximately 4 weeks. Review these results. If corrections are necessary, you may bring the appropriate materials to the Financial Aid Office and have those corrections submitted electronically.
4. Once the Financial Aid Office has received your FAFSA results, we will review your file. Once your file is complete, you will be sent an official Financial Aid Award letter, explaining what types of financial aid you are eligible to receive.

Basic Eligibility Requirements

Eligibility for most federal student aid programs is based on financial need. In addition, the federal student aid programs require that the student recipient:

- Not possess a bachelor's degree for grant eligibility.
- Be a United States citizen, eligible noncitizen, U.S. National, or permanent resident.
- Have a valid Social Security Number.
- Have a high school diploma, GED, or recognized equivalent. **Proof of passing GED scores must be on file with the Records and Registration Department before your application can be processed.** Students without a high school diploma or GED may establish eligibility under the Ability-to-Benefit regulations by passing a test approved by the U.S. Department of Education. The COMPASS placement test is the approved test available at Columbus State through the Testing Center in Aquinas Hall 002. To qualify for consideration students must have the following minimum scores: Writing Skills: 32; Reading: 62; Math (Pre-Algebra): 25.
- Have complied with current Selective Service registration regulations. For more information on Selective Service requirements, contact the Financial Aid Office or our Web page: <http://www.csc.edu>.
- Be a regularly admitted student, enrolled in an eligible program, working toward a degree or certificate.
- Not be in default, or owe an overpayment on any type of federal financial aid.
- Maintain satisfactory academic progress as defined by the Financial Aid Standards of Academic Progress Policy.

Verification

Verification is the process through which the federal government requires confirmation of the accuracy of the information reported on the Free Application for Federal Student Aid (FAFSA). If you are selected for verification, you must provide clear evidence that the information you reported on your FAFSA is true and correct. The Financial Aid Office will contact you regarding specific requirements pertaining to your application if you are selected.

Generally, signed IRS income tax returns, Verification Worksheets, and documentation of untaxed income are required.

Satisfactory Academic Progress

Federal regulations require that Columbus State Community College monitor the academic progress of students who apply for and/or receive federal financial aid. These regulations apply to each financial aid applicant, regardless of whether a student has ever previously applied for or received financial aid. To receive any form of federal financial aid, students must maintain satisfactory academic progress toward a degree or certificate. For additional information refer to the *High Finance* publication available from the Financial Aid Office or the Web page: <http://www.csc.edu>. **Failure to maintain satisfactory academic progress will result in funds either being terminated or withheld until eligibility is regained.**

Scholarships

A scholarship is financial assistance awarded primarily on the basis of scholastic achievement. As with grants, they generally do not have to be repaid.

The Columbus State Community College Development Foundation provides scholarships based upon availability of funding. Private donors, professional organizations, and the College establish these scholarships. Eligibility varies for each scholarship program. Students may apply for these scholarships by completing the Application for Development Foundation Scholarships, available in the Financial Aid Office. In general, these scholarships are based on variable criteria including, but not limited to, technology, financial need, credit hours earned, and academic and individual achievement. Scholarship applications are available in the spring for the upcoming financial aid year.

Below are examples of some recently awarded scholarships.

- The Martha B. Agler Scholarship
- Alpha Rho Epsilon Leadership Scholarship
- American Culinary Federation Columbus Chapter Scholarship Endowment
- Auxiliary Services Part-Time Scholarship
- Aviation Safety Institute/John B. Galipault Memorial Scholarship
- Hector Boiardi Scholarship
- Barbara Brandt Scholarship
- Borghese Family Solar Challenge
- Business Management Scholarship
- Campos-Moeller Families Access Scholarship
- Carol Kizer Ohio Hospitality Educational Foundation ProStart Scholarship
- Columbia Gas of Ohio Minority Scholarship
- Columbus Club of Printing House Craftsmen/Rodney G. Bland Scholarship
- Columbus State Scholarship Endowment
- Construction Financial Management Association (CFMA) Scholarship
- Construction Sciences Scholarship
- Hospitality Management Memorial Scholarship
- Disability Services Scholarship
- Donald A. Borrer/Dominion Homes Endowed

Scholarship

- Dr. Kevin May Global Campus Scholarship
- Firststar Bank Endowed Scholarship for African-American Students
- Frank P. Gallo SCORE Scholarship
- Greg Golden Memorial/ERC Scholarship
- Grant/Riverside Methodist Hospitals–OhioHealth Scholarship in Medical Assisting Technology
- Grant/Riverside Methodist Hospitals–OhioHealth Scholarship in Surgical Technology
- Robert A. Harris Memorial Scholarship
- Huntington National Bank Student Scholarship
- International Facility Management Association Scholarship (IFMA)
- International Wine and Food Society Scholarship
- Janet E. Jackson Scholarship in Legal Assisting
- JC Penney Scholarship
- Mary Kay Jockisch Memorial Scholarship
- Dr. Patricia Keats Kasile Scholarship Endowment
- Frank B. Kroeger Engineering Technology Scholarship
- Limited Brands Scholarship
- Limited Brands Women’s Scholarship
- Lowe’s Home Improvement Warehouse Scholarship
- Victor Lucas Single Parent Scholarship
- MAPSYS Partner in Education Scholarship
- Mathematics Scholarship
- John M. McCormac, Jr., Scholarship in Emergency Medical Services
- Mechanical Engineering Technology Scholarship (MET)
- Cameron Mitchell Scholarship
- Nationwide Scholarship Endowment
- Nelson Homes Scholarship
- Harold M. Nestor Scholarship
- Northwest Title/Union Savings Bank Real Estate Scholarship
- Ohio Children’s Foundation Scholarship
- Paralegal Studies
- Phi Theta Kappa Scholarship
- Elijah Pierce Scholarship
- The Police Academy Scholarship
- Real Estate Scholarship Endowment
- Rebecca Redman Twin Rivers Link
- Robert “Bob” Tepper Scholarship
- Ron Lofton Disability Services Scholarship
- Ross Laboratories Sports and Fitness Management
- Ross Laboratories Division of Abbott Laboratories Scholarship in Biological and Physical Sciences
- Chris Sayre Memorial Automotive Technology Scholarship
- The Scotts Company Scholarship in Landscape Design/Build
- Social and Behavioral Sciences Scholarship
- State Auto Insurance Companies Scholarship in Microcomputing
- Timberlake Massage Therapy
- Union Tools Scholarship Endowment
- R. Reid Vance Memorial/Printing Industry of Central Ohio
- Carol Watkins Medical Laboratory Internship Award
- Marybelle Williams Adult Student Scholarship

- Stephen H. Wilson Mental Health/Chemical Dependency/Mental Retardation Scholarship
- Wolfe Associates Scholarship in Technical Communication
- Worthington Industries, Inc., Work Study Scholarship

Students can view scholarship information electronically by using the ‘Scholarships’ link from the Financial Aid section of <http://www.csc.edu>.

If you have been awarded a scholarship from an outside agency or organization, you will be responsible for notifying the Financial Aid Office of this award. The organizations from which the award was made will need to provide, in writing, verification of what school-related expenses may be covered and/or any requirements for the scholarship. This information is required prior to the release of any scholarship award.

Freeze Dates

CSCC uses a freeze date each quarter to determine a student’s enrollment status for disbursing financial aid. The number of credit hours a student is enrolled on the freeze date is used to calculate the amount of financial aid he/she will receive. This means that if a student adds or drops classes before the freeze date, the amount of financial aid he/she is eligible for will be affected. If classes are added or dropped **after** the freeze date, the financial aid will not change.

The freeze date is designed to coincide with the close of the 100% tuition refund period. Please refer to the online class schedule or the printed quarterly Enrollment Guide for the 100% refund dates for full-term, first-term, 4-week term, eight-week term, and flex-term classes.

Refund Policy

Students who withdraw from classes are refunded their instructional and general fees according to the procedure established by the College.

If a financial aid program has paid for a student’s tuition and fees, the refund is made to the program and not to the student. In the case of Federal Stafford Loan or Federal PLUS Loan, the refund is made directly to the lending institution.

Students who receive financial aid over and above the cost of tuition and fees (i.e. a cash disbursement) and withdraw from classes during the refund period may be required to return all or part of the cash disbursement.

OIG recipients dropping below 12 credit hours during the 100% refund period will be required to repay the entire amount of the grant. OIG or OCOG recipients dropping below 12 credit hours during the 50% or 25% refund period will be required to repay a percentage of the grant.

Return of Unearned Title IV Funds Policy

Financial aid students who completely withdraw from all classes during a given quarter may be subject to owing federal and state funds back to the Department of Education. The policy states that a student must attend through the 60 percent point of the quarter in order to earn their federal financial aid. For more information on this policy, please refer to the “High Finance” publication that is available in the Financial Aid Office or the Financial Aid Office Web page: <http://www.csc.edu>.

Veterans Services

Columbus State Community College is proud to serve the training needs of veterans and other eligible persons. Students eligible to receive VA educational benefits must register with the Veterans Services Office in order to receive their benefits.

To apply for VA educational benefits, students must have completed the college admissions application and paid the application fee. Students should contact the VA Coordinator at least six weeks before they plan to attend to begin the application process.

Each applicant will be provided with a copy of the Standards of Satisfactory Academic Progress for VA Recipients, current VA guidelines, and pay scales.

To request an application or to receive more information about VA benefits, contact the VA Coordinator at (614) 287-2644.

Information and Services

The Financial Aid Office is located in Rhodes Hall, Lower Level. Our Customer Service Representatives are available in person or over the phone to answer your questions and direct you to the appropriate resources. Financial Aid Customer Service is located on the lower level of Rhodes Hall or call (614)-287-2648.

Telephone Numbers

Financial Aid Representative (614) 287-2648
Toll Free 1 (800)-621-6407
VA Coordinator (614) 287-2644

Customer Service Hours

Financial Aid Office

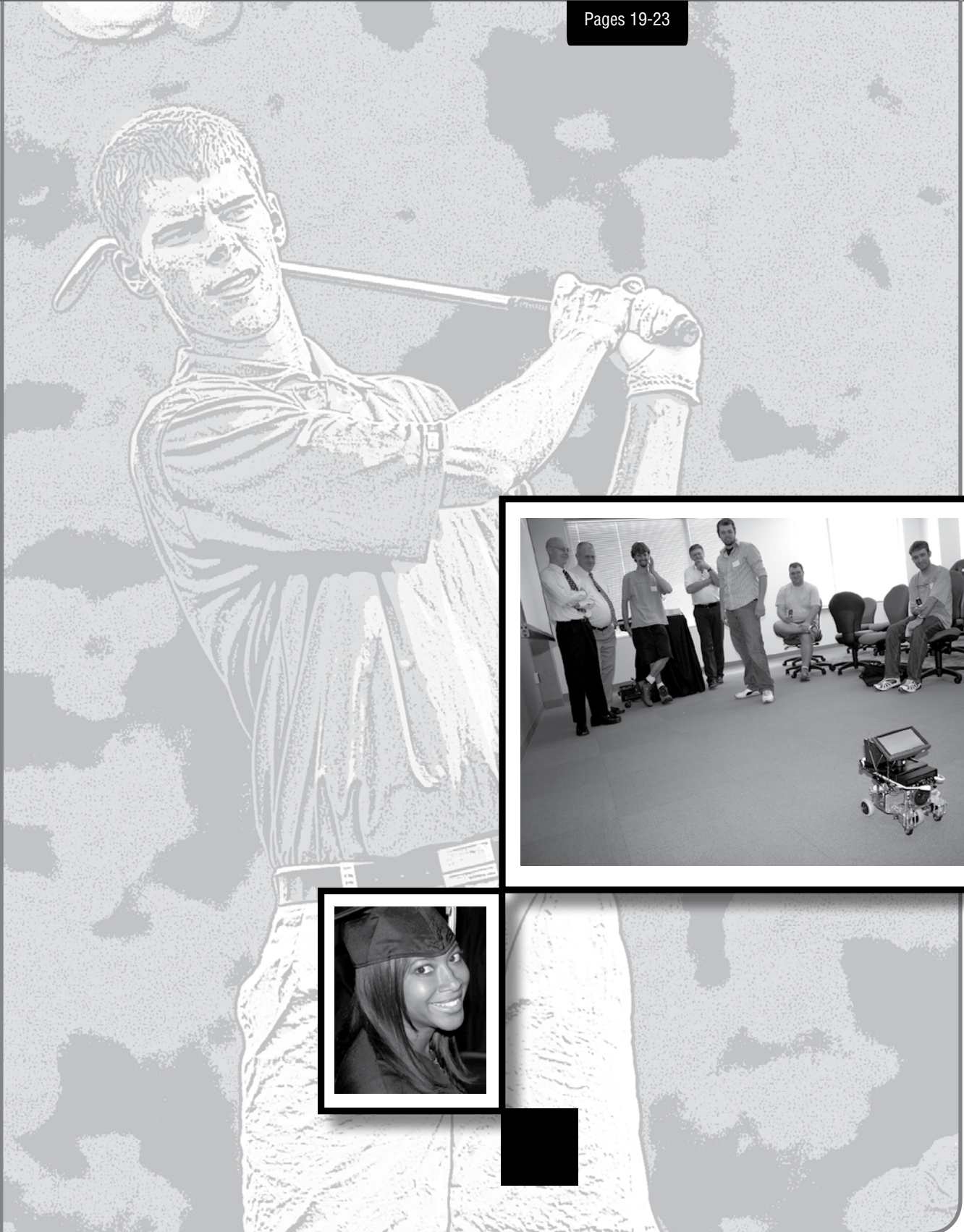
Monday – Thursday 8 a.m. – 7:30 p.m.
Friday 9:30 a.m. – 4:30 p.m.
Saturday 9 a.m. – noon

Veterans Services Office

Monday – Thursday 8 a.m. – 5 p.m.
Friday 9:30 a.m. – 4:30 p.m.

FEES

Pages 19-23



Fees

One-Time Fee

Matriculation Fee (nonrefundable) \$50

Matriculation Fee

The one-time, nonrefundable \$50 matriculation fee covers the cost of enrolling at the College, including application and permanent record maintenance and a student identification card. The matriculation fee will appear and be due for payment on the schedule and fee statement for the academic quarter in which the student initially registers for a class, even if the class is dropped or cancelled.

Instructional and General Fees

The resident credit hour fee of \$79.00 is based on a \$70.00 instructional fee and a \$9 general fee. The general fee defrays the cost of registration, student activities services, and student support services of a noninstructional nature. Fees for non-Ohio residents and international students reflect a similar prorated instructional and general fee amount. All fees are subject to change.

Quarterly Academic Fees

Ohio Residents

Ohio residents are charged a combined instructional and general fee of \$79.00 per credit hour. This fee includes a \$70.00 instructional fee and a \$9.00 general fee.

Non-Ohio, U.S. Residents

Non-Ohio, U.S. residents are charged a combined instructional and general fee of \$175.00 per credit hour. This fee includes a \$159.00 instructional fee and a \$16.00 general fee.

International Students

International students are charged a fee of \$210.00 per credit hour. This fee includes a \$189.00 instructional fee and a \$21.00 general fee.

Lab Fees

Lab fees are charged to cover the cost of consumable materials used by the student. The cost of student liability insurance, required in certain health technologies, will be included in the lab fee.

Fee Payment

At the time of in-person registration for classes, the student will be given a class schedule and fee statement. When registering over the phone or on CougarWeb, the student can access their class schedule

under “my schedule” and the charges under “make-a-payment” online via the Web at www.csc.edu. Fee payment deadlines are listed in the quarterly enrollment guide at the above Website.

Late Payment of Fees

Fees not paid by published quarter deadline dates will result in the student’s schedule being dropped. If a student is dropped for non-payment, when they re-register, there will be a \$75 re-registration fee. After any deadline date, any class registered should be paid the same day to avoid being subsequently dropped or restricted from future registrations or transcript requests.

NOTE: Financial aid does not automatically pay fees for courses added after the fee payment deadline. You may contact the Financial Aid Office for fee payment options. Additionally, Financial aid will not be available to pay for full-term or first-term classes added after the 100% refund period.

Student Health Insurance

Columbus State Community College offers low-cost group accident and sickness insurance. All full-time students are eligible for the plan. Coverage is worldwide, 24 hours a day, at home, at school or while traveling. The fee provides coverage for the entire 12-month period. Extended coverage for family and dependents is also available at an additional cost. For more details, request a student insurance program brochure from the Cashier’s Office in Rhodes Hall or the Local Representative, Acordia, at www.acordia.com/colleges

Prior Learning Assessment Fee

Students with life experience that has provided learning similar to academic course outcomes may request a review of that experience by the appropriate academic department chairperson. A nonrefundable \$50 fee is charged to review the information and/or portfolio.

Proficiency Examination Fee

Students who believe they possess the knowledge contained in a course may request of the academic department to take a proficiency examination. A nonrefundable \$50 fee is charged for each proficiency examination to be taken and is payable to the Cashier’s Office prior to taking the exam. Information concerning proficiency examinations may be obtained by contacting the chairperson of the department offering the course for which the exam is to be taken.

Transient Student Fees

Transient students (those who are taking one or more courses to transfer back to another college or university) complete the same application and follow the same registration process as other students taking courses for credit. The instructional, general, lab and appropriate residency status fees shall be charged for courses taken. The one-time, nonrefundable \$50 matriculation fee covers the cost of enrolling at the College, including application and permanent record maintenance, and a student identification card. The matriculation fee will appear and be due for payment on the schedule and fee statement for the academic quarter in which the student initially registers for a class, whether the class is dropped or cancelled. It is recommended that transient students receive approval from their home institution to take specific Columbus State Community College courses to ensure transferability and applicability of the credit at their home institution.

Release of Records and Transcripts

Columbus State Community College, in all good faith, will not release non-directory information to individuals and organizations outside of the College without the student's written permission, except when required by law. Students may request that an official Columbus State transcript be sent to organizations and individuals outside of the College by completing the Transcript Request Form available in the Records and Registration Department and available via the Web at www.csc.edu. A photo ID is required for the student or individual picking up the transcript in person. Transcripts will not be released to an individual other than the student without detailed written permission signed by the student specifying the name of the person picking up the transcript. If a balance is owed to the College, Columbus State will not release a transcript for or to a student until the balance is paid in full.

The Family Educational Rights and Privacy Act of 1974, as amended, governs the maintenance and release of records. A copy of the regulations is available in the Records and Registration Department, or by sending a written request, including the student's signature to that department. (See the *Catalog*, page 30, for a summary of the act.)

Refunds

The quarterly instructional, general and lab fees are refundable for student-initiated drops in accordance with the following guidelines:

Instructional and general fee refunds are based upon the percentage of time elapsed in each course. If the course is dropped with 10% of the time elapsed in the course, a 100% refund of instructional and general fees will be issued. If the course is dropped with 20% of the time elapsed in the course, a 50% refund of instructional and general fees will be issued. If the course is dropped with 30% of the time elapsed in the course, a 25% refund of instructional

and general fees will be issued. Lab fees may be refundable based upon the same percent of refund issued for instructional and general fees. No refunds are given beyond 30% of the term.

Please check with the Records and Registration Department for these deadlines, or refer to refund dates published in the quarterly Enrollment Guide.

A total refund of quarterly fees is made when a program is cancelled or closed and the student does not elect, or is not permitted, to enroll in another program.

If there are extenuating circumstances that have prevented the student from dropping his or her class(es) within the 100%, 50%, or 25% refund periods and warrant exception to the refund procedure, the student must complete the tuition refund request form. All tuition refund requests submitted with the statement of explanation, written and signed by the student, and supporting third party documentation by the deadline are reviewed and approved or denied by a committee. All requestors are notified of the committee's decision via USPS mail.

Refund requests submitted after the following dates will not be



considered:

- Summer Quarter – November 15th of the **same** year
- Autumn Quarter – February 15th of the **following** year
- Winter Quarter – May 15th of the **same** year
- Spring Quarter – August 15th of the **same** year

The Tuition Refund Request form is available in the Records and Registration Department or via the Web at www.csc.edu

Resident, Non-Resident, and International Student Status for Tuition Purposes

A resident of Ohio “for all other legal purposes” shall mean any person who maintains a 12-month place or places of residence in Ohio, prior to applying to the College, who is qualified as a resident to vote in Ohio and receive state welfare benefits, and who may be subjected to tax liability; provided such person has not, within the time prescribed by this rule, declared himself or herself to be, or allowed himself or herself to remain, a resident of any other state or nation for any of these or other purposes.

In determining whether an enrolled student is an Ohio resident,

the College shall make a determination of fact in accordance with the above standards.

General Residency for Tuition Surcharge Purposes

The following persons will be classified as residents of the State of Ohio for tuition surcharge purposes:

- Dependent students, at least one of whose parents or legal guardians has been a resident of Ohio for 12 consecutive months or more immediately **preceding** the enrollment of such student in an institution of higher education;
- Persons who have resided in Ohio for all other legal purposes for at least 12 consecutive months immediately preceding their enrollment in an institution of higher education and who are not receiving and have not directly or indirectly received in the **preceding** 12 consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.
- A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of a term of enrollment, has accepted full-time employment and established domicile in Ohio for reasons other than gaining the benefit of favorable tuition rates.

Documentation of full-time employment and domicile shall include, but is not limited to, both of the following documents:

- A sworn statement from the employer or the employer’s representative on the letterhead of the employer or the employer’s representative certifying that the parent or spouse of the student is employed full-time in Ohio.
 - A copy of the lease under which the parent or spouse is the lessee and occupant of rented residential property in the state; a copy of the closing statement on residential real property located in Ohio of which the parent or spouse is the owner and occupant; or if the parent or spouse is not the lessee or owner of the residence in which he or she has established domicile, a letter from the owner of the residence certifying that the parent or spouse resides at that residence.
- People who live and are gainfully employed full-time or part-time and self-sustaining in Ohio and who are pursuing a part-time program of instruction at an institution of higher education.

Residency Exceptions and Circumstances

- A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents will be considered residents of Ohio for these purposes.
- A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall



be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.

3. Any alien holding an immigration visa or classified as a political refugee shall be considered a resident of the State of Ohio for state subsidy and tuition surcharge purposes. (See C I and C II above.)
4. No one holding a student or other temporary visa shall be eligible for Ohio residency for these purposes.
5. A dependent person classified as a resident of Ohio for these purposes shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of one academic degree program.
6. In determining residency of a dependent student, removal of the student's parents or legal guardian from Ohio shall not, during a period of 12 months following such removal, constitute relinquishment of Ohio residency status otherwise established under item (C).
7. Any person once classified as a nonresident, upon the completion of 12 consecutive months of residency in Ohio for all other legal purposes, may request reclassification as a resident of Ohio for these purposes. Should such person present clear and convincing proof that no part of his or her financial support is, or in the preceding 12 consecutive months has been, provided directly or indirectly by persons or entities who are not residents of Ohio, for all other legal purposes, such person shall be reclassified as a resident (exceptions: non-immigrants). Evidentiary determinations under this rule shall be made by the College, which may require, among other things, the submission of information regarding the sources of a student's actual financial support to that end.
8. Any reclassification of a person who was once classified as a nonresident for these purposes shall have prospective application only from the date of such reclassification.
9. A person who is transferred by his employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.
10. A person who has been employed as a migrant worker in Ohio (and his or her dependents) shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

A change in residency status under is never automatic, and must be initiated by an application for such change by the person seeking it. For further information on residency for tuition purposes, please contact the Residency Officer in the Records and Registration Department.

Parking Regulations

All motor vehicles, including motorcycles, parked on campus must have a current CSCC parking permit. Permits can be purchased online or from the Cashier's Office located on the second floor of Rhodes Hall. Hours are Monday–Thursday, 8 a.m.–6:00 p.m.; Friday 9:30 a.m.–4:30 p.m. On the two Saturdays prior to the start of a quarter and the Saturday following the first week of a quarter, the Cashier's Office and Public Safety Office will be open limited hours. Please call (614)-287-2525 for more information.

To purchase a permit, you must have paid your tuition fees. Parking fee for one vehicle is \$25.00 per quarter, and everyone is limited to one parking pass. You must purchase a parking permit **each quarter**.

Parking Permit Location

1. Parking permit must be affixed to the inside of the rear window, lower right hand corner, or on the inside of the windshield, lower corner passenger side, if the vehicle windows have dark tint.
2. Permits are to be displayed so all information including permit number is clearly visible.

Temporary Permits

1. Temporary permits are available to those who need to park a vehicle that does not have a parking permit. Temporary permits may also be issued for special needs such as temporary handicap parking (limit 30 days) with a doctor's letter.
2. Temporary permits are available from the Public Safety Department at no cost. The temporary permit will be issued providing verification of the purchase of a regular permit.

Replacement Permits

Lost or stolen parking permits will be replaced at a cost of \$25.00.

Misuse of Permits

All parking permits are registered to the student or employee who was issued the permit and are nontransferable.

Towing

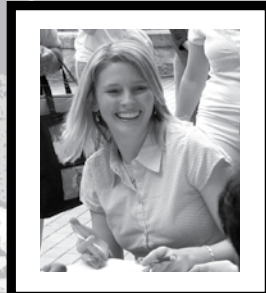
Unauthorized and illegally parked vehicles are subject to being towed at the owner's expense.

Notes

GRADING AND ACADEMIC

Procedures

Pages 25-32



Grading and Academic Procedures

Grades

At the end of each quarter and upon the completion of course requirements, the instructor reports a letter grade indicating the quality of a student's work. Points for each quarter hour of credit attempted are assigned according to the following system:

Quality		Value	Credit Awarded
Excellent	A	4	Yes
Good	B	3	Yes
Average	C	2	Yes
Poor	D	1	Yes
Failing	E	0	No
Satisfactory	S	0	Yes
Unsatisfactory	U	0	No

Other Marks

Incomplete (I). When circumstances beyond the control of a student or a faculty member prevent the completion of course requirements during the course, an "I" (Incomplete) may be recorded until the final grade is established. An Incomplete is indicated only when the student has arranged for that grade with the faculty member and specific arrangements have been made for fulfilling the course requirements. Coursework must be completed within six weeks after the beginning of the next quarter. If a new grade is not submitted by the faculty member by that time, a grade of "E" is automatically recorded.

Transfer Credit (K/KD). To receive credit for a course taken at another college or university, a student must request that an official copy of the transcript from each previous institution attended be mailed to the Records and Registration Department. An official transcript is one that is in a sealed envelope bearing the other institution's official letterhead and/or logo; is printed on official, secure paper that has been signed and sealed by the other college or university; and has not been opened prior to being submitted to Columbus State Community College. The official transcript copy becomes and remains the property of the College. Please see page 63 for information on the Ohio Transfer Policy. Transfer credit does not apply to meeting residency credit hour requirements.

Examination/Proficiency Credit (X). A student may, upon the department chairperson's approval of the student's petition, be permitted to take a proficiency examination for credit. Permission is given only in cases when it is evident that previous experience or study warrants. A \$50 nonrefundable fee will be charged for each proficiency examination. Nursing students may take proficiency examinations only after they have been accepted into the Nursing Technology. Examination/proficiency credit does not apply to meeting residency credit hour requirements.

Audit (R). A student may audit a course for informational instruction only and with the understanding that credit may not be granted or later claimed as a result for the audited course. The course may be taken at a later date for credit. Neither proficiency, nontraditional, transfer or waiver credit will be given for a course that has been audited. ***Audit status is declared at the time of registration and no later than the fourteenth calendar day of the quarter. The audit status cannot be declared after the fourteenth calendar day of the quarter. Once the audit status for a course is declared, the status cannot be changed back to a credit status during the quarter or after the quarter has ended.***

Any student wishing to audit a course is required to register for the course in the same manner as all other students and pay regular fees. The instructor will record a grade of "R" for the audited course.

Nonresident Credit (N). Nonresident credit through Prior Learning Assessment (PLA) may be awarded by the appropriate department chairperson for a student's documented life experiences that provide evidence of knowledge equivalent to that of a required course. If a portfolio is required, a fee of \$50 will be charged for portfolio evaluation. Nonresident credit does not apply to meeting residency hour requirements. Approved nonresident credit is posted to the transcript after the student has completed one course at CSCC.

Withdrawal (W). A course must be dropped before 10% of the course has elapsed to avoid a "W" appearing on the academic transcript. Withdrawals after 10% of the course has elapsed through the 63rd calendar day of the quarter for full-term courses and the 32nd calendar day of first-term courses are recorded as "W" on the academic transcript. Please refer to the Web at www.csc.edu for specific quarterly date information. See "Course Drop/Withdrawal Procedure" in this section of the Catalog.

No Grade Reported () – A blank indicates that the instructor did not report a grade. The instructor must report a grade within six weeks after the beginning of the next quarter, otherwise a final grade of "E" is automatically recorded. A student receiving a () should contact his/her instructor.

Incorrect Grade Reported – A student who believes a grade reported is incorrect, should contact his/her instructor. If the grade is determined to have been incorrectly reported, the instructor must submit a Grade Change Form/Request for Updated Transcript to the Records and Registration Department to update the student's transcript.

Grade Report

Grades are issued by the instructor via the Web. Once grades are issued by the instructor, the student can view the grades via a secure site on the Web at www.csc.edu.

Calculating Grade Point Average

The basis for determining scholastic standing is the cumulative grade point average (GPA). The College uses a 4.0 scale (A=4.0, B=3.0, C=2.0, D=1.0, E=0.0). The grade point average is calculated by first multiplying credit hours for each course by the grade point value earned for the course. See the example in the chart below (credit hours x grade point value = total grade points earned for a course). Divide the total grade points earned for all courses attempted by the total credit hours for all courses attempted to determine cumulative grade point average.

EXAMPLE

Course	Credit Hours	Course Grade Received	Grade Point Value	Course Grade Points (Credits x Pt. Value)
Beg Comp (ENGL 101)	3	B	3	3x3 = 9
Med Term (MULT 101)	2	B	3	2x3 = 6
Physiology (BIO 169)	5	C	2	5x2 = 10
Hematology (MLT 141)	6	A	4	6x4 = 24
Emergencies (MULT 103)	2	B	3	2x3 = 6
Total Credit Hours =	18			Total Grade Points =55

Total Grade Points	55		
GPA =	$\frac{55}{18}$	=	3.055
Total Credit Hours	18		

Academic Standing

Each active student's record is reviewed at the close of each quarter. If a student's academic record (all courses attempted with a grade received) does not meet the Standards of Satisfactory Academic Performance, the student is subject to being placed on academic warning, academic probation, or academic dismissal. The entire record, including each grade in each credit course attempted, is used to determine academic standing. Please see the Standards of Satisfactory Academic Performance below.

Standards of Satisfactory Academic Performance

TOTAL GPA CREDITS	GPA
1-9	1.0
10-19	1.4
20-29	1.5
30-39	1.6
40-49	1.7
50-64	1.8
65-84	1.9
85+	2.0

Dean's List

To recognize outstanding scholastic achievement, a Dean's List is compiled each quarter. To qualify for the Dean's List, a student must complete a minimum of 6 credit hours and earn a grade point average of 3.5 or higher in that quarter. All credits must be in courses included in the calculation of the GPA. No student is eligible for the Dean's List who has a grade of "I."

Academic Honors

An Academic Honors List is compiled at the end of spring quarter to recognize students who are not eligible for the Dean's List but who have achieved outstanding scholastic success over an academic year. Part-time students who have earned 12 or more hours of credit in any academic year (summer, autumn, winter and spring quarters) with a GPA of 3.5 or above will be recognized on the Academic Honors List at the end of spring quarter.

Class Attendance

Students are expected to attend all classes. A student who has excessive unexcused absences during the quarter and has not officially dropped the course will receive an "E" in that course. Additional attendance policies may be defined by each technology chairperson, department coordinator, or instructor.

Satisfactory Academic Progress

Satisfactory Academic Progress is defined as progress in credit courses taken at the College that result in the credit hour to grade point average ratio as specified by the Standards of Satisfactory Academic Performance. For the purpose of graduation, a candidate for an Associate of Arts or Associate of Science degree must have a minimum 2.000 cumulative grade point average. A candidate for an Associate of Applied Science or Associate of Technical Studies degree must have a minimum 2.000 cumulative grade point average in all required technical course work and a minimum 2.000 cumulative grade point average (GPA) in all nontechnical course work.

Academic Warning

Any quarter in which a student's grade point average *for the term* drops below 2.000, he/she will be placed on Academic Warning and "WARNING" is printed on the student's grade report and transcript.

Academic Warning, First Term Only Rule

A student who is enrolled in his/her first term and is placed on academic warning will be restricted from registering for classes until he/she meets with an academic advisor in Advising Services. This restriction also applies to first-term students on academic warning who have already registered for the next quarter and attempt to add or drop a class. During the meeting, an Academic Warning Form will be completed to designate what difficulties led the student to be placed on academic warning, to provide recommendations for improved grades the next quarter, and to promote academic success at the College.

Academic Warning and Students Beyond the First Term

Students who are beyond their first term of enrollment and receive a grade point average of less than 2.000 for any term will be strongly recommended to meet with an academic advisor or counselor.

Academic Probation

A student who is beyond his/her first term is placed on academic probation when his/her cumulative grade point average is below that designated by the Standards of Satisfactory Academic Performance.

The student will be restricted from registering for classes until he/she meets with an academic advisor in Advising Services for academic intervention. This restriction also applies to students on academic probation who have already registered for classes for the next quarter and attempt to add or drop a class. During the meeting an Academic Probation Form will be completed to designate what difficulties led the student to be placed on academic probation, to provide recommendations for improved grades the next quarter, and to promote academic success at the college. A student who has been placed on academic probation will have 24 additional attempted credit hours (over 2 or more terms) to raise his/her cumulative grade point average to that designated by the Standards of Academic Performance.

Academic Dismissal

A student will be academically dismissed from the college if, after being placed on academic probation and registering for 24 additional credit hours (over 2 or more quarters), the student's cumulative grade point average remains less than that designated by the Standards of Satisfactory Academic Performance.

A student who is academically dismissed will be sent a letter notifying him/her of dismissal status and explaining the procedure for readmission. A student who is academically dismissed from the college **will not be permitted to enroll the following quarter**. If the student has already registered for the next quarter, his/her **Courses will be dropped and the student will not be permitted to attend**. This procedure is done within one week of processing the quarterly grade report/transcript.

Petition for Readmission

Any student petitioning for readmission must submit a Petition for Academic Readmission Form and meet with at least two college reviewers, at least one of whom is in Advising Services (to determine conditions under which the student may return). The second reviewer is either the Director of Advising Services or the student's academic department chairperson. If both college reviewers do not grant approval, the Registrar will determine final disposition. The entire readmission process (including all needed signatures) must be completed 30 calendar days prior to the beginning of the quarter for which the student seeks readmission. If a student is readmitted to the college, the student is then able to schedule classes and pay fees. The readmitted student must make satisfactory progress in accordance with the Standards of Satisfactory Academic Performance and meet the conditions as specified on the Petition for Academic Readmission form, including receiving a 2.000 term grade point average, in order to be eligible for continued enrollment.

Last Day to Complete Petition for Readmission

For Summer Quarter 2007: May 28, 2007
For Autumn Quarter 2007: August 20, 2007
For Winter Quarter 2008: December 6, 2007
For Spring Quarter 2008: March 3, 2008
For Summer Quarter 2008: June 2, 2008

Petition for Academic Review

Upon a second or any subsequent dismissal, the student who does not meet conditions must appeal to the Academic Review Board for readmission. The student must submit a Petition for Academic Review Form to the Director of Advising Services. The entire readmission process (including all needed signatures) must be completed 30 calendar days prior to the beginning of the quarter for which the student seeks readmission. Petition for Academic Review Forms will be available from the Records and Registration Department and from Advising Services. The Director of Advising and Counseling Services will chair and convene a board comprised of six members in addition to herself/himself. This Academic Review Board will review the petition (explaining the situation leading to the additional dismissal), as well as supporting documentation and the student's verbal explanation. Following its review and consideration of this information, the board will determine whether another readmission is warranted. The decision of the Academic Review Board will be final. Meeting with the Academic Review Board does not guarantee readmission.

Last Day to Complete Petition for Academic Review

For Summer Quarter 2007: May 28, 2007
For Autumn Quarter 2007: August 20, 2007
For Winter Quarter 2008: December 6, 2007
For Spring Quarter 2008: March 3, 2008
For Summer Quarter 2008: June 2, 2008

Prior Learning Assessment

Columbus State Community College has a comprehensive policy that allows students to apply previous learning from a variety of sources toward completion of a college degree. However, it is important that students understand that the college grants credit for demonstrated learning, not merely for previous experience or employment. In order to obtain credit, the student must be able to provide sufficient documentation to verify the prior learning experiences, along with providing evidence that he/she has mastered the competencies included in that learning experience.

Prior learning experiences that can be considered for college credit are:

Transfer Credit: Previous college coursework from an accredited college or university can be applied for credit toward a comparable course at CSCC.

Standardized Testing: Mastery of knowledge or skills measured by a nationally accepted standardized examination (such as CLEP, licensing and certification examinations).

Articulation Credit/Advanced Placement Agreements: College-level learning achieved and documented while participating in a program in which the college has made previous arrangements to accept the coursework for credit, if specific curriculum and performance outcomes standards have been met.

Formal Training: College-level noncredit training experiences that, singly or in combination, cover the competencies of one or more college courses (such as continuing education courses, company training programs, professional seminars).

Military Training: College-level learning obtained while a member of the U.S. Armed Forces that directly relates to knowledge and skills included in existing coursework can be granted in accordance with the American Council on Education (A.C.E.) guidelines.

Life Experience Learning: College-level learning from sources other than those listed above that can be documented /demonstrated (such as self-study and work experience).

Because course content and technology may change rapidly, departments may determine a time that can lapse between the acquisition of learning and when the credit is being sought. This may vary depending upon the course.

Students who wish to request nontraditional credit through prior learning assessment must complete the Request for Nontraditional Credit Form and meet with the chairpersons of the department offering the course for which nontraditional credit is requested for a preliminary interview.

Fresh Start Rule

The Fresh Start Rule is intended to help students who were unsuccessful in their previous academic attempts and who voluntarily left Columbus State Community College and returned after a substantial period of time. In general, a student with courses in which grades of “D”, “E” or “U” were earned, may be eligible to have the grades expunged from the student’s record; the course(s) remain on the transcript. To be eligible for the Fresh Start Rule the basic requirements include, but are not limited to, the following:

- The student must have been away from the College for at least three consecutive years.
- The student has earned at least 12 credit hours with grades of “C” or better in every course since returning to the College following the minimum three consecutive year absence. Developmental courses are not included in the total.

A student may use the rule one time. An information sheet providing the complete requirements for the Fresh Start Rule and petition are available in the Records and Registration Department and via the Web at www.csc.edu.

Course Drop/Withdrawal Procedure

Students may drop full-term and second-term courses through the 63rd calendar day of the quarter, and they may drop first-term courses through the 32nd calendar day of the quarter (including Saturdays, Sundays and holidays). Please see the Records and Registration Department for deadlines for other short-term courses. To drop a class, it is the responsibility of the student to initiate the process with the College by using the Web, www.csc.edu, CATS (Computer Automated Touchtone System) registration at (614) 287-2287; calling the Telephone Information Center, (614) 287-5353; or submitting a completed Registration Add/Drop Form to the Records and Registration Department or an Off-Campus Center during business hours. The revised schedule is the student’s verification of completed registration transactions. Failure on the part of a student to follow drop procedures will result in an “E” (failing grade) being recorded for the course or courses on the grade report.

Retroactive Academic Withdrawal

A student who received failing grades as the result of documentable extenuating circumstances that prevented the student from following academic withdrawal procedures may be eligible to petition to retroactively withdraw from courses and have those grades changed to “W.” Students must provide adequate third-party documentation that explains the extenuating circumstances. More information is available from the Records and Registration Department.

Repeating Courses

A student may repeat a course. Only the repeated course grade received will be used to compute the overall grade point average. However, both grades shall remain a part of the student’s permanent record. Veterans and other financial aid recipients should check with the Financial Aid Office before repeating a course for which credit has been earned.

Program of Study Change

Students may request a Program of Study change in the Records and Registration Department. Students may also call the Telephone Information Center, at (614) 287-5353, to change their program of study if the new program of study does not have a separate application procedure (such as many of the health related fields). Students transferring from one technology program to another shall not be required to carry the technical grade point average of the previous technical courses as a part of the technical grade point average of the new technical program. However, the grade point average of all courses taken will remain part of the official

transcript record. Only those courses comprising the curriculum of the new technology will be considered when calculating the technical and nontechnical grade point averages for determining eligibility to graduate.

Degree Audit Report

The Degree Audit Report System (DARS) is an important advising tool that helps students determine progress toward completion of their program or degree requirements. DARS provides a written report of courses in progress, courses completed, and courses remaining for completion of program or degree requirements. It also reflects technical and nontechnical grade point averages (for technical programs) and the overall grade point average (all programs). Your advisor can help you interpret this report. Regular use of the DARS report will assist the student in making prudent course selections. Students may view or request copies of their DARS report on the Web at www.csc.edu.

Student Status

Students are considered first-year status when they have successfully completed 47 or fewer credit hours as recognized by the College. A student shall be considered second-year after having satisfactorily completed a minimum of 48 credit hours of coursework as recognized by the College.

A full-time student is one who is registered for 12 or more credit hours during a quarter. A part-time student is one who is registered for 11 or fewer credit hours during a quarter.

Petition to Graduate

Each student who wishes to graduate must obtain a Petition to Graduate Form from the Records and Registration Department or via the Web at www.csc.edu at the beginning of the quarter prior to the one in which the student intends to graduate. The student must meet with his or her academic/faculty advisor, for the evaluation of all course work completed, review of cumulative grade point averages, and review of courses for which he or she is registered the current quarter to determine eligibility for graduation. The petition to graduate form must be filed with the Records and Registration Department by the published deadline date for the intended quarter of graduation. The student will be notified of graduation eligibility.

Petition to Graduate Deadline Dates

Autumn Quarter 2007: August 3, 2007
Winter Quarter 2008: December 7, 2007
Spring Quarter 2008: February 1, 2008
Summer Quarter 2008: May 2, 2008

Graduation Requirements

Graduation requirements for technical and transfer programs are listed in the "Programs of Study" section in this Catalog.

Graduation Honors

Grade calculations through the quarter of graduation determine the appropriateness of posting "Honors" on the graduate's transcript and Summa Cum Laude, Magna Cum Laude, or Cum Laude on the diploma. Verification of the completion of graduation requirements will be done after grades have been issued. Please allow eight weeks for delivery of the diploma via certified mail. Graduates' grade point averages and honors designations printed in the graduation program are based on calculations of all grades through the quarter *prior* to their graduation quarter. Honors categories are as follows:

- *** Summa Cum Laude (with greatest praise) 4.000 GPA
- ** Magna Cum Laude (with great praise) 3.999-3.850 GPA
- * Cum Laude (with praise) 3.849-3.500 GPA

Commencement

A formal graduation ceremony is held at the end of each quarter. All students who have petitioned to graduate for the current quarter are invited to attend the ceremony. Diplomas are not distributed during the ceremony. Diplomas will be issued after the verification of graduation requirements is complete. Please allow eight weeks for delivery of the diploma via certified mail. Caps and gowns, furnished by the College, are standard attire for the ceremony. Students graduating with honors are distinguished by wearing gold honor cords. Summa Cum Laude graduates are further distinguished by wearing engraved honor medallions. Class remarks are offered by the graduate attending the ceremony who has maintained a 4.0 cumulative grade point average (GPA) with the largest number of credit hours completed at Columbus State Community College. The 4.0 graduate attending the ceremony with the second largest number of credit hours completed at Columbus State Community College leads the pledge of allegiance.

Replacement Diplomas

To obtain a replacement diploma, submit an Official Request for Replacement Diploma Form, available at www.csc.edu or in the Office of the Registrar. Send the form along with a \$15 replacement fee to: Cashier's Office, 550 E. Spring Street, Columbus, Ohio 43215. The replacement diploma will be sent to your current address via certified mail. Please allow 12 weeks for delivery.

Student Rights Under the Family Educational Rights and Privacy Act of 1974 as Amended

1. Definition of Education Record

Under the Act, “education records” mean, with certain exemptions as listed below, those records, files, documents, and other materials that contain information directly related to a student and are maintained by any unit of the College. The following categories of information are exempted and are not considered to be “education records”:

- a. Records made by College personnel that are in the sole possession of the maker and are not accessible or revealed to any other person.
- b. Records maintained by the College Public Safety Department.
- c. Medical and counseling records used solely for treatment. Medical records may be personally reviewed by a physician of the student’s choice.

2. Right to Inspect and Review

Each student is granted the right to inspect and review all his or her education records except the following:

- a. Financial records of parents.
- b. Confidential letters and statement of recommendations for admission, employment or honorary recognition placed in education records after January 1, 1975, for which a student has signed a waiver of his or her right of access recorded by the Act.

3. Waiver of Rights of Access

A student may waive his or her right of access to confidential letters and statements of recommendation. If the student signs a waiver, he or she shall be notified, upon request, of the names of all persons making confidential recommendations. Waivers are valid only so long as they are made for the purposes stated in Paragraph 2b. The College may not require a student to waive his or her right of access accorded by the Act for receipt of College benefits or services.

4. Location of Education Records

Columbus State Community College does not maintain education records in any one central office. Academic education records are maintained in the Admissions Office, Financial Aid Office, and the Records and Registration Department. Questions regarding the location of individual student records should be directed to the Records and Registration Department.

5. Procedures for Inspection and Review

- a. Requests to review records must be made in writing separately to each office maintaining records.
- b. If any material or document in the education record of a student includes information on more than one student, the right extends to inspect and review only such part of such material or document as relates to such student or

to be informed of the specific information contained in such part of such material.

- c. Periodically, student records are reviewed and expunged, and only records that are necessary to determine education status and demography are maintained indefinitely. Pertinent documents of Columbus State Community College students will be microfilmed or scanned periodically and the originals destroyed.
- d. All submitted and generated student education record information, documentation, and material becomes and remains the property of Columbus State Community College.

6. Right to Challenge Information in Records

Students have the right to a hearing to challenge the content of their records on the grounds the information contained therein is inaccurate, misleading, inappropriate, or in violation of their privacy or other rights. The hearing process includes an opportunity for the correction or deletion of such information and to insert into such records written explanations by the student regarding the content of such records.

Note: The right to challenge grades does not apply under the Act unless the grade assigned was inaccurately recorded.

7. Procedures for Hearings to Challenge Records

Students challenging information in their records must submit in writing a request for a hearing to the appropriate office maintaining the records, listing the specific information in question and the reasons for the challenge. Hearings shall be conducted, with a decision rendered in writing within a reasonable period of time after the challenge is filed.

Hearings will be conducted and a decision rendered by a College official who does not have a direct interest in the outcome of the hearing. Students shall be afforded a full and fair opportunity to present evidence relevant to the reasons for the challenge as referenced in paragraph 6. It shall be the responsibility of the office maintaining the record in question to ensure the hearing is conducted in accordance with the provisions of the Act and within applicable Columbus State Community College procedures. Students may appeal the decision of the hearing officer. Appeals shall be in writing and submitted to the Dean of Enrollment Services within 10 days of the student’s notification of the decision of the hearing officer. The appeal shall be heard and decided, with a decision rendered in writing within a reasonable period of time.

8. Consent for Release

Written consent must be obtained from students for the release of education records or information that makes it possible to identify the student with reasonable certainty. The consent statement shall specify which records are to be released, the reasons for release, and to whom they are released. A copy of the release record shall be made available to the student if he or she requests. Columbus State Community College, in all good faith, will not release nondirectory information to individuals and organizations outside of the College without the student’s written permission, except when required by law.

The requirement for written consent does not apply to the following:

- a. Requests from faculty and staff of Columbus State Community College who have a legitimate educational interest on a “need-to-know” basis.
- b. Requests in compliance with a lawful subpoena or judicial order. Students shall be notified of all such subpoenas or orders in advance of compliance.
- c. Requests in connection with a student’s application for, or receipt of, financial aid.
- d. Request by state or federal authorities and agencies specifically exempted from the prior consent requirements by the Act—organizations conducting studies on behalf of the College if such studies do not permit the personal identification of students to any persons other than to representatives of such organizations and if the personal identification is destroyed when no longer needed.
- e. Information submitted to accrediting organizations.
- f. In the case of emergencies, the College may release information from education records to appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health or safety of a student or other persons.
- g. Requests for “directory information.” (See item 9)

Note: The College will not unilaterally send student records to other educational institutions. Students transferring from the College or making application to other educational institutions must notify the Records and Registration Department in writing and pay the appropriate fee to release official transcripts to other institutions. A student may request official transcripts for his or her own use, issued to student, by completing the form available from the Records and Registration Department or via the web at www.csc.edu.

9. Directory Information

Columbus State Community College, in accordance with the Act, has designated the following categories of information about students as public information:

- a. Name
- b. Address (home/present)
- c. Telephone Number (home)
- d. Program of study/technology
- e. Participation in officially recognized activities and sports
- f. Weight and height of members of athletic teams
- g. Enrollment status (less than half-time, half-time, part-time, full-time, over full-time, inclusive dates and quarters of enrollment)
- h. Degrees, certificates, transfer module and awards received (including Dean’s List and Academic Honors List)
- i. Most recent previous educational agency or institution attended

Note: Students have the right to have this directory information withheld from the public if they so desire. Each student who desires that directory information be withheld shall so indicate by completing a form available in the Records and Registration Department.

10. Inquiries Outside Columbus State Community College

The College receives many inquiries for directory information from a variety of sources, including friends, spouses, parents, other relatives, prospective employers, other institutions of higher education, honor societies, licensing agencies, government agencies, and the news media. Each student is advised to carefully consider the consequences of a decision to withhold directory information. Columbus State Community College, in all good faith, will not release nondirectory information to individuals and organizations outside of the College without the student’s written permission, except when required by law.

11. Record of Access

- a. Each office maintaining and releasing student records shall maintain a record, kept with the education records of each student, which will indicate all parties, other than those specified in paragraph 8 above, who have requested or obtained access to the education records and specifically the legitimate interest that each such party has in obtaining this information.
- b. Columbus State Community College, in all good faith, will not release personal information about students except on the condition the party to which the information is being transferred will not permit access by a third party without the consent of the student, except when required by law.

12. Complaints

Any student who has reason to believe the College is not complying with the Act should inform the Dean of Enrollment Services and the U.S. Department of Education in writing. The Dean of Enrollment Services shall promptly review all such allegations.

13. Questions

Direct questions concerning your understanding of the Act to the Registrar.

ADDITIONAL SERVICES

to Students

Pages 33-41



Additional Services to Students

The Discovery Exchange: College Bookstore and More

The Discovery Exchange, located at the corner of Cleveland and Mt. Vernon avenues, is a college bookstore and so much more. Inside the DX, customers will find the College Bookstore, Café & Barista, DX Copy Express, and On-the Go Convenience Store. In addition to textbooks for classes, customers can select from best-sellers, magazines, gifts items, apparel, flowers, art and office supplies, electronics, and computer software and accessories. Services available at the DX include daily textbook and used-calculator buyback, dry cleaning, international faxing, stamps, and money orders. Graduating students also can pick up caps and gowns at the DX.

The Café & Barista is a coffee bar and café that serves made-to-order lattes, mochas, and other coffee and tea drinks (served hot, frozen, or on ice). The café boasts a selection of fresh fruit, bagels, pastries, soups, salads, and sandwiches, many of which will satisfy the palettes of the health-conscious and vegan patrons.

The DX Copy Express offers a self-service Xerox machine and a Sony picture maker. On the lower level of the DX, numerous printing and shipping services are available, including lamination, document binding, First Class Postage, Airborne/DHL shipping, courier services, scanning, graphic design, graduation announcements, color print services, and notary services by appointment.

The DX's On-the-Go Convenience Store, which offers convenient walk-up window service along Mt. Vernon Avenue, stocks a wide variety of items to make everyday life a little easier. "Grab and Go" items include sandwiches, snacks, candy, fountain drinks, nachos & cheese, hot popcorn, frozen treats, and coffee. Stamps and money orders can be purchased, too.

The Discovery Exchange is open Monday-Thursday, 8:00 am – 8:00 p.m.; Friday, 8:00 am – 6:00 p.m.; and Saturday, 8:00 am – 12:00 pm. Contact the DX at 614-287-2427 or <http://bookstore.csc.edu>.

Off-Campus students can order textbooks and course supply needs, Monday through Friday, online (<http://bookstore.csc.edu>) or by phone (614) 287-5353. Visa, MasterCard, and Discover credit cards are accepted. Two delivery options are available: 1) UPS, which has a shipping and handling fee; or 2) Self-Pickup, no charge, at the DX (within two business days of order) or at CSCC's Dublin Center, Southeast Center, Southwest Center at Bolton Field, or Westerville Center (within three business days of order). A valid student ID, driver's license, or state ID is required for pickup. Contact the DX, 614-287-2427 for more information.

Cashier's Office

The Cashier's Office is located on the second floor of Rhodes Hall. Hours of operation are Monday–Thursday, 8 a.m.–6 p.m.; Friday, 9:30 a.m.–4:30 p.m.; closed Saturdays; with extended hours during fee payment rush periods each quarter. The Cashier's Office handles all fee payments, including parking permits (\$25) and replacement identification cards (\$4). Amusement park tickets (Summer Season), bus passes, and postage stamps also can be purchased at the Cashier's Office. For more information, contact the Cashier's Office at (614) 287-2414.

Child Development Center

The Columbus State Child Development Center (CDC) is a year-round facility providing care and education to the children of Columbus State students, staff, and faculty as well as the downtown

community. The CDC also serves as a field site for students in the Early Childhood Education Department. As part of the Center for Workforce Development, the center's address is 315 Cleveland Ave., but the entrance is at the southeast corner of Grant and Grove streets. Children served range from six months to five years of age. The CDC is licensed through the Ohio Department of Job and Family Services and accredited through the National Association for the Education of Young Children. The center also partners with the Early Learning Initiative, a school readiness program for preschoolers. The center is open Monday–Friday, 7:30 a.m.–6:00 p.m. Tuition subsidy (for eligible parents) is available through contracts with the Ohio Department of Job and Family Services, Champion of Children, and ELI. For more information or a tour please call (614) 287-3600.

Student E-Mail

Don't start the quarter without your free e-mail account. Columbus State Community College offers **StudentMail**, your own e-mail account, to all currently enrolled students. StudentMail is accessible at the Web site: <http://student.csc.edu/>.

All currently enrolled first-quarter students will receive a letter in the mail notifying them of their account and instructions. Information and instruction booklets are available at the IT Learner Support Center and at the StudentMail Web site. Your e-mail username and password can also be used to access Blackboard courses and login to campus labs.

The IT Learner Support Center, (614) 287-5050, is on the ground floor of the ERC/Library in Columbus Hall. Lab assistants are available in computer labs to answer questions regarding your StudentMail account.

Advising Services

Advising Services offers the following services and programs to assist Columbus State learners:

- New student academic advising, including after taking the COMPASS placement test
- General academic advising and planning
- Transfer advising, including the annual College Transfer Fair, and opportunities to meet with admissions representatives and academic advisors from other institutions
- Educational workshops and programs
- Student resources such as The Adult Learner Connection
- Advising and assistance for students having academic difficulty (academic warning, academic probation, dismissal, and petitions for readmission and academic review)
- Petitions to graduate for Associate of Arts and Science students

Academic Advising at Columbus State

After students apply to Columbus State, academic advisors in Advising Services provide guidance on first quarter classes, either after students have taken the COMPASS placement test or after students' transcripts from previous institutions have been reviewed. Students with transfer credit from another college, should have official transcripts sent to the college and have an unofficial copy in hand when they meet with an advisor. In the first quarter advisors also review the specific requirements for completion of the student's academic program. **Programs of Study** for all degrees and certificates are in the Columbus State catalog or on the Web at www.csc.edu. Academic advisors can help students with academic planning throughout their studies at Columbus State.

Advising Services provides academic advising and planning for the following students:

- **Transfer students** pursuing the Associate of Arts (AA) or Associate of Science (AS) degrees
- **Transient students** from other institutions taking classes at Columbus State
- **Undecided students** who are still exploring their educational and career goals
- **Technical program students** in Business or Engineering two-year programs through their first quarter of classes (Note: These students are assigned a faculty advisor during their second quarter.)
- **Technical program students** in one of the Health or Human and Public Services programs, including pre-Nursing, who have not yet been accepted into the program (Note: These students are assigned a faculty advisor when they are accepted into their respective programs.)
- **Associate of Technical Studies (ATS) program students** (Note: ATS students begin with an academic advisor and then work with the appropriate departments in Career and Technical Programs.)
- **Any students** experiencing academic difficulty

To locate an academic advisor, go to the Columbus State Web site at www.csc.edu, or call (614) 287-2668.

Why is academic advising important? Academic advisors can help students select the correct courses for their major or career goal, and they can help develop a quarter-by-quarter plan for students' academic programs. Assistance in choosing a major or finding a career direction is also available. Advising Services offers a wide range of educational and career-related information, including transfer opportunities, transfer guides, and visiting advisors from area four-year colleges who can help students with their planning for, and transition to, bachelor's degree programs. Students can access much of this information directly by exploring our web site: www.csc.edu.

Educational Workshops Now Online

Advising Services provides educational workshops online for many different topics designed to enhance the social, educational, and personal well-being of students. These virtual "Web shops" and related resources are available on our Web site at www.csc.edu. Topics include stress/time management, choosing a major, career/life planning, test-taking, test anxiety, study skills, self-esteem, learning styles, wellness and body image, and many others. Individual consultations are also available on these same topics. To arrange an appointment call (614) 287-2668.

Contact Us

Advising Services is located on the first floor of Aquinas Hall, Room 116. Students are seen primarily by appointment. For more information on any of our services or to schedule an appointment, please stop by or call (614) 287-2668. To e-mail an advisor, go to www.csc.edu, Current Students, Get Help, Academic Advisor Directory."

Hours of Operation

Monday-Thursday: 8:00 a.m. – 7:30 p.m.*

Friday: 9:30 a.m. – 4:30 p.m.*

Saturday: 9:00 a.m. – 1:00 p.m.*

*Appointment times vary; students are seen up to 1/2 hour before closing.

Academic advisors are also available at the Dublin site (614) 287-7050, the Southeast site (614) 287-7200, and the Westerville site (614) 287-7020. Call ahead for walk-in hours at the Off-Campus sites, or access them on the web at www.csc.edu. Phone and e-mail advising services are convenient options for distance learners. Links are available from the Advising site off of "Current Students".

Career Assistance Center – Acloch 

Through a partnership with Acloch , a regional leader in Staffing and Human Resources Solutions, Columbus State Community College students and alumni have access to a full range of career assistance services, including:

- Career fairs
- Resume workshops
- Interviewing tips
- Connections with career opportunities and area employers

- Short-term, long-term, part-time, and full-time employment
- Internships and co-ops

To access career placement and career resources available through Acloché Career Assistance Center, Columbus State students and alumni can visit Nestor Hall, Room 119, or call (614) 287-5279. Regular office hours are 9 a.m.–6 p.m. Monday and Tuesday, 8 a.m.–5 p.m. Wednesday and Thursday, and 7:30 a.m.–4 p.m. Friday.

Contact the center for information on registration for career assistance or visit www.csc.edu.

Counseling Services

Personal Counseling

Counseling Services offers personal and career counseling, alcohol and drug counseling and prevention, crisis intervention, consultation and referral services to any enrolled student. Issues include, but are not limited to, stress/time management, college adjustment, family concerns, substance abuse, and other personal or mental health concerns. Presentations, workshops, programs and printed materials about mental health, alcohol, and other drug prevention and abuse are also offered.

Counseling Services also provides self-development groups and educational workshops each quarter on a variety of important and relevant topics, such as overcoming test anxiety, study skills, stress and time management, juggling roles, anger management, self-esteem, and others. Confidential counseling is provided on an individual, short-term basis, with referral to community resources for additional services, if needed.

Services for faculty and staff such as consultation, in-class workshops on specific mental health topics and information about community resources are also available.

Career Counseling

Counseling Services also offers career counseling for students, including assistance with career decision-making, choosing a major, redirecting educational plans, and/or planning for a career change. In addition, career services include assessing skills and interests and subsequently relating them to college majors and/or careers and assisting students in creating a career exploration plan (i.e., developing a career portfolio, guidance on conducting an informational interview, and exposure to relevant career development web resources). Referrals may also be made to the Acloché Career Assistance Center on campus for job placement information, resume writing, and other career related topics.

Computer assessments include the Discover Career Planning System: This computer-based career planning system can be accessed in Aquinas Hall, Room 116 or the ERC (library) located on the top floor of Columbus Hall.

For more information, visit Counseling Services' Web page, <http://www.csc.edu/counseling/mentalhealth/index.htm>

All counseling services are free and available by appointment.

Please call 614-287-2668 or 1-800-621-6407, or stop by 116 Aquinas Hall to schedule an appointment.

Hours of Operation

Monday/Wednesday/Thursday: 8 a.m. – 5:30 p.m.

Tuesday: 8 a.m. – 6:00 p.m.

Friday: 10:00 a.m. – 4:30 p.m.

Disability Services

Columbus State Community College offers a wide range of support services to encourage the enrollment of people with disabilities. Through the Disability Services Department, support services are made available to qualified students with a documented disability. Determination of eligibility for support services is based on disability documentation received by Disability Services from appropriate medical, educational, and psychological sources. These support services include, but are not limited to, adapted testing procedures, materials in alternate media, textbooks on tape, note taker notebooks, real-time captioning, and counseling. In addition, sign language interpreters and assistive listening devices are available for students who are deaf or hard of hearing. Adaptive equipment and software is also available on campus for student training and use in completing course requirements. Students may also meet with department counselors to develop an individual plan for support services. The department consults with students, consumers and professionals in the field of rehabilitation and education, as well as state and federal resources in the continued development of program accessibility.

For further information or to arrange for support services, please call (614) 287-2570 (VOICE/TTY). Disability Services is located in Franklin Hall, Rooms 223 and 228. More information is available on the Web at www.csc.edu/docs/Disability/indexds.htm. You can also e-mail the department at disability@csc.edu.

Educational Resources Center (Library)

The Educational Resources Center in Columbus Hall houses the Library and Media Services, providing a multimedia environment to support a wide range of learning experiences. The Library's collection includes print, audio-visual, and electronic materials. In addition to the collection in the main stacks, there are collections of reference, reserve materials, periodicals (magazines and journals), microforms, newspapers, pamphlets and video-based courses. The Library catalog can be accessed through the ERC's Web page (www.csc.edu/library), which serves as a gateway to the Library's electronic resources. Through Columbus State's membership in the OhioLINK network, library users have access to materials that may be requested online from the libraries of more than 80 Ohio colleges and universities. You need an active Cougar ID to access these resources.

In addition to the Library's collection of over 500 print periodical titles, users may search over 100 online research databases available through ERC subscriptions on OhioLINK. Many of these



databases provide links to full-text articles and may be accessed from home computers. Also available through the ERC Web site, the Electronic Journal Center provides access to over six million full-text articles from scholarly journals. Reference assistance is available on the main floor of the ERC, and students are encouraged to ask for help in starting their research or in using a particular resource.

In the ERC, there is a 28-station computer lab, as well as copiers, and typewriters. A dedicated computer lab for library instruction classes is also housed here. The Media Production Center, located on the ground floor of the ERC, offers display and presentation development assistance. These services, which include scanning documents (and converting to MS Word docs), photos and illustrations to be used for classroom assignments, and project consultation, are free with a valid Columbus State Community College ID. For more information about the ERC, call the Circulation Desk at (614) 287-2465, Reference Services at (614) 287-2460, or Media Production Services at (614) 287-2472.

Food Service

Located in Delaware Hall, the cafeteria is open Monday – Thursday, 7 a.m.–7 p.m., Friday, 7 a.m.–2 p.m., and Saturday, 7:30 a.m.–1:30 p.m. Breakfast foods are served until 10:30 a.m. The cafeteria has a wide variety of foods to choose from such as rotisserie chicken meals, hot carved sub sandwiches, chicken pot pie and hot meals with many side dishes. It also features chicken salad, pitas, and stir-fry dishes. The grill features combo meals with fries and a drink, seasoned twist fries and more. Customers can also purchase salads, soups and fruit. Take-out food such as tacos, pizza, and subs are available, too. Call (614) 287-2483 for more information.

Housing

Opportunities for student housing, including information on apartments, home sharing, and roommate matching, are available through Student Activities and Athletics. Students are encouraged to stop by the Student Activities Office, Nestor Hall 116, or call (614) 287-2637 for current housing information. Columbus State does not provide campus housing, the Student Activities Office only disseminates information it receives.

Department of Public Safety Police/EMS, Safety & Security, Parking & Special Services

The College's police officers are commissioned by the Ohio Attorney General's Office, Ohio Peace Officers Training Council. The officers provide the following services:

- Patrol of campus lots and buildings
- Investigation of threats, harassment, disruptive or offensive actions and disorder
- Investigation of forced entry, theft or vandalism, and other criminal activity
- Security escort service
- First aid to injured or ill people
- Enforce Ohio laws, College policy and rules

The department works closely with the Ohio State Highway Patrol, the Franklin County Sheriff's Office, and the Columbus Police Department. The department also has a working relationship with other university police departments.

The Public Safety Department serves the Columbus State community 24 hours a day, 7 days a week. The Public Safety Office is

located in Union Hall, Room 048, and can be reached by telephone at (614) 287-2525.

More information, including the Department of Public Safety's Annual Report, Clery crime statistics and crime logs, can be found at www.csc.edu.

Recreational Facilities

A study lounge and a recreation lounge are located in Nestor Hall. The recreation lounge has a large screen television. A movie is offered weekly, Monday–Friday, from 9 a.m.–3:30 p.m., in the Nestor Hall recreation lounge. There is also a gymnasium in Delaware Hall 134. Open gym is Monday, through Friday from 9 a.m.–noon. The Fitness Center is located in the lower level of Delaware Hall. For more information contact (614) 287-2445 or 287-2637.

Student Intercollegiate Athletics

Columbus State currently offers the following intercollegiate sports:

Men's Basketball	Women's Basketball
Cheerleading	Women's Volleyball
Men's Golf	

Tryouts are typically held during autumn quarter, with the exception of women's volleyball, which holds tryouts during summer quarter. For more information on open tryouts, please contact the Office of Athletics, Delaware Hall, Room 134, or call (614) 287-2445.

To participate in athletics, a student must be a high school graduate or have earned a General Education Diploma (GED). Student

athletes must carry a minimum of 12 credit hours per quarter and maintain the GPA required by Columbus State to be eligible for competition (some part-time students may be eligible). The College adheres to the guidelines established by, and is a member of, the National Junior College Athletic Association (NJCAA). Athletic scholarships are available for student athletes participating in men's and women's basketball, golf and volleyball. Columbus State is a member of the Ohio Community College Athletic Conference (OCCAC). This conference status allows our student-athletes to compete against other two-year colleges as well as some four-year institutions.

For more information about athletic programs call (614) 287-2445 or stop by the Athletics Office located in Delaware Hall 134, or visit www.csc.edu/sports/.

Intramural Sports

The intramural sports program is an integral part of campus life. Intramural activities provide the campus community the opportunity to compete in athletic events without the time commitment of intercollegiate athletics. All students, as well as faculty and staff with a valid Columbus State ID, are eligible to compete. Intramural offerings include basketball, bowling, volleyball, softball, soccer, floor hockey, wiffle ball, and flag football. For more information call (614) 287-5348 from 8 a.m.–4:30 p.m.

Columbus State Bridgeview Golf Course & Driving Range

The Bridgeview Golf Course, 2738 Agler Road, is a challenging and scenic 9-hole golf course that is owned and operated by the



College. The course is open year round, weather permitting, and is home to Columbus State golf classes and other academic uses. Leagues, lessons, and season passes are available.

The Driving Range has thirty sheltered and heated tee boxes and is open year round. CSCC employees and students can take advantage of a discount at the driving range, golf course, and pro shop. For more information contact the driving range, (614) 471-0871, golf course, (614) 471-1565, or Jeffrey Pruzinsky, manager, (614) 471-4257.

Wellness Program

The Department of Student Activities and Athletics sponsors a wellness program for students, faculty, and staff of the college. Individual Wellness consists of five components: physical, social, emotional, mental, and spiritual. The activities offered through the wellness program attempt to balance the five components through lectures, hands-on demonstrations, and seminars. Typical wellness offerings include chi gong, exercise to Afro-rhythms, pilates, tae kwon do, tai chi, women's self-defense, and yoga. For more information, call (614) 287-5348.

Student Activities

The Department of Student Activities and Athletics (Student Activities Office, Nestor Hall 116 and Athletics Office, Delaware Hall 134) offers a variety of co-curricular activities that enhance students' educational experience and aid in the development of life-long skills. Students are also offered a wide range of opportunities to improve their general leadership skills while on campus.

Student Ambassador Program

The Student Ambassador Program was developed to allow students the opportunity to participate in various public relations and recruiting activities at Columbus State. The primary objectives of the program are to provide students with basic leadership training and to allow students the opportunity to work in a number of departments on campus. Community outreach and community service is also a component of the Student Ambassador Program. Applications for the Student Ambassador Program are available during autumn and spring quarters.

Special Events and Activities

The Department of Student Activities and Athletics offers a number of special events and activities such as Welcome Back (autumn), Spirit Week (winter), Spring Fling (spring), and Jazz in July (summer). In addition, Earth Day, Black History Month, Women's History Month, Asian-Pacific American Awareness Month, and other special interest activities are celebrated.

Student Organizations

In order to be recognized by Columbus State Community College and be eligible for benefits of that recognition, student clubs and

organizations must register as a new club or organization and annually renew the registration of an existing club or organization with Student Activities and Athletics, Nestor Hall 116. Registration signifies that the club or organization will comply with the rules, regulations, and guidelines of the College. Clubs at Columbus State include:

African American Women's Support Group "Sister Friends"
Alpha Phi Omega
Campus Outreach
Columbus State Drama Club
Columbus State Landscape Association
Columbus State Running Club
Columbus State Student Nurses' Association
Columbus State Student Organization of the
American Dental Hygienists Association
Columbus State Tae Kwon Do Club
Cougar Chess Club
For a Better Ohio
Rainbow Cougars
International Student Association
Liberian Students Association
Muslim Student Association
Phi Theta Kappa
Silent Connection
Somali Student Association
Student Government Association
Student Chapter of Ohio Association of
Veterinary Technicians
Student Paralegal Association
The College Democrats
The College Republicans
Accounting Honorary Society
Columbus State Architecture Association
Columbus State Computer Club
Columbus State Film Club
Columbus State Roller Hockey Club
Crime Stoppers
El Club de Español de Columbus State
Equestrian Club
Eta Sigma Delta
Pathways to Medicine
Project Brotherhood
Society of Manufacturing Engineers

To learn more about our clubs and organizations, stop by the Student Activities Office, Nestor Hall 116, or call (614) 287-2637.

Diversity Initiatives

The Office of Diversity Initiatives leads Columbus State's efforts, programs, and activities to increase the access and retention of students from diverse backgrounds. Within the established policies and procedures of the College, Diversity Initiatives works with Columbus State offices and departments to:

- Implement orientation and professional development programs related to diversity for College administrative, instructional, professional, and support personnel.
- Promote activities and programs that will result in increased

retention and graduation rates of multicultural and various nontraditional students.

- Market Columbus State as an attractive institution of higher education for myriad students to pursue career goals.

The office is active in the Columbus community and has established working relationships with middle and high school principals, counselors and teachers, as well as with local religious, civic, and community leaders. Diversity Initiatives develops and presents programming to promote awareness of multicultural issues and the value of a diverse educational community. Through such activities as campus visits and college credit articulation programs, potential students gain exposure to the College and discover its advantages. For information on Diversity Initiatives, call 287-5648.

International Initiatives

Columbus State's International Initiatives program is responsible for the development and implementation of programming and long-range planning for the College's international students, exchange students and scholars, curriculum, and many visitors from around the world. The program is the liaison and support to faculty, staff, and departments, and it works closely with the Global Initiatives Committee and the Provost to internationalize the curriculum, among other activities. The office of Diversity Initiatives oversees the International Initiatives program. Call 287-5648 for information.

Travel/Study Abroad

Columbus State Community College offers trips abroad to explore subjects such as world civilization, cultural diversity, marine biology, Spanish and French. In the recent past, multiweek trips to Greece, Mexico, France, Jamaica, and the American Southwest have been organized to fall between the end of Spring Quarter and the beginning of Summer Quarter. Trips can be taken in conjunction with Capstone Courses (completed after the tour group returns) or as noncredit excursions. The office of Diversity Initiatives (287-5648) coordinates study abroad opportunities.

Peer Tutoring Program

The campus-wide Peer Tutoring Program offers individual or group tutoring to eligible learners through the Developmental Education Department. The purpose of the program is to supplement learners' academic performance. Tutoring service is based on tutors' availability; therefore, learners are not guaranteed a peer tutor. Walk-in service is available for learners who need minimal assistance. Learners are encouraged to request a tutor the second or third week of school. For more information, call (614) 287-2474.

Student Rights and Responsibilities

Student Conduct

The aim of Columbus State Community College student conduct policies and procedures is to educate students on their rights and responsibilities as college community members and to promote a college environment that is conducive to student success. Students are expected to perform all work honestly, maintain prescribed academic standards, pay all debts to the college, and respect the property and rights of others. This includes any activity on or off campus that negatively impacts the college or its students or staff.

Any student violating Columbus State Community College policies or rules may be placed on disciplinary probation or be dismissed. Concerns involving allegations or violations of civil rights, including but not limited to sexual harassment, sexual misconduct with students, and/or harassment, are addressed by the college's EEO officer in the Human Resources Department. In technologies that include internship employment or clinical experiences, good standing with the cooperating employer or clinical affiliate is expected and is essential to continuation in the program. A copy of the Student Conduct Policy, the Academic Conduct Policy, the Student Code of Conduct and related procedures is published in the Student Handbook. The Student Handbook is available through many student services offices including Advising Services and Counseling Services, Aquinas 116, Student Activities and Athletics, Nestor 116, and is on the College Web site, www.csc.edu.

Student Handbook

The Student Handbook is a useful guide to many of the campus resources available to students. The handbook provides information on student rights and responsibilities, policies, procedures, activities, services, and extracurricular opportunities at Columbus State. The Student Handbook is available through many student services offices including Advising Services and Counseling Services, Aquinas 116, Student Activities and Athletics, Nestor 116, and is on the college website, www.csc.edu.

Sexual Harassment and Sexual Assault Policy

Columbus State Community College believes that all employees and students should be able to work and learn in an environment free of all discrimination and any form of sexual harassment or assault. To help ensure that employees and students are not subjected to illegal harassment or assault, and in order to create a comfortable work and learning environment, the College strongly opposes and prohibits any offensive physical, written, spoken or nonverbal conduct as defined and otherwise prohibited by state and federal law. In addition, sexual assault involving physical contact, sexual battery, and rape are felony crimes in Ohio. In cases where the student is the perpetrator, college policy defines sexual harassment and sexual assault as an example of general student misconduct, which may result in penalties up to and including dismissal from the college. For more information, or if you or someone you know is being sexually harassed, contact the College's EEO officer in the Human Resources Department, Rhodes Hall lower level, 287-2408. In emergency cases or after business hours, and in all cases of sexual assault or rape, immediately contact the Public Safety Department, Union 048, (614) 287-2525. In all cases of sexual

harassment or sexual assault, confidential personal counseling and support for students is available in Advising and Counseling Services, Aquinas 116, (614) 287-2668.

Student Problem Resolution

A student problem resolution procedure has been established to help students resolve nonacademic and nondisciplinary problems they may encounter on campus. A copy of the Columbus State Community College Student Problem Resolution Procedure is published in the Columbus State Student Handbook or the Columbus State Policy & Procedures Manual. The Student Handbook is available through many student services offices including Advising Services and Counseling Services, Aquinas 116, Student Activities and Athletics, Nestor 116, and is on the College Web site, www.csc.edu.

Student Right to Know

Under the terms of the Student Right to Know Act, the College must maintain and report statistics on the number of students receiving aid related to athletics, reported by race and gender; the graduation rate for athletes participating in specific sports, reported by race and gender; the graduation rate for students in general, reported by race and gender; and other relevant statistics. To obtain copies of these reports, contact the Student Life Office, Aquinas 116H, or access www.csc.edu.

Crime Awareness and Campus Security Act

Federal legislation requires Columbus State Community College to maintain data on the types and number of crimes on college property as well as policies dealing with campus security. To obtain additional information, contact the Public Safety Department, Union 048, or access www.csc.edu.

College Testing Services—Testing Center

The mission of the College Testing Services—Testing Center is to meet the testing needs of the campus community. We aim to provide a facility in which tests can be administered accurately and securely according to instructor and department guidelines. The center offers COMPASS placement testing, departmentalized testing, classroom make-ups, and distance learning testing. After you complete the COMPASS placement test, an advisor in Advising and Counseling Services will interpret your scores, and results for courses are obtained from the course instructor. The center also provides proctoring for non-Columbus State academic examinations. There is a service fee of \$25 per non-Columbus State exam. The service is available to anyone in the community; however, the Testing Center reserves the right to deny a proctor request at any given time. The Testing Center maintains a partnership between learners, faculty, the community and the center's staff.

Tests may be taken anytime between the opening and closing times of the Testing Center. However, tests will not be distributed one hour prior to closing, and tests must be finished by closing time. No extension of time will be given; therefore, participants should plan sufficient time for taking tests.

The Testing Center is located in Aquinas Hall, Lower Level, Room 002. A picture ID is required. No children, food or beverages are allowed in the Testing Center. For more information, call (614) 287-2478 or 287-3602.

Tutoring Services

Learning Skills Centers (LSC)

The Learning Skills Centers offer tutorial assistance from professional tutors in the Developmental Education Department. Tutoring is provided for developmental mathematics, reading and writing courses. These centers also house computers for students' use and offer VCRs for students who wish to view lecture tapes after classes. Learners are encouraged to visit the centers to enhance their academic studies. Both centers are located in Aquinas Hall, mathematics in Room 213 and reading/writing in Room 214. For more information, call (614) 287-5193.

Math Tutors

Faculty tutors are available on a walk-in basis for most math courses, beginning with MATH 102 through MATH 104 and other selected courses, in Room 313, Davidson Hall. For more information, call (614) 287-5313.

Biological and Physical Sciences Tutors

Faculty tutors are available for most Biological and Physical Science courses in Nestor Hall, Room 023, for more information please call (614) 287-2522.

English as a Second Language Tutors

Faculty tutors are available to ESL students in Franklin Hall, Room 245, for more information please call (614) 287-5400

TRiO Programs

To be eligible for a TRiO program, applicant must be a first-generation college student (neither parent has a four-year college degree), and/or economically disadvantaged or limited income, according to the federal standards (federal TRiO programs) and/or an individual with a disability, a learning or physical disadvantage and academic need (determined by project guidelines). Call 287-5648 for more information.

Educational Talent Search

Educational Talent Search is a pre-collegiate program for middle school, high school, and GED students. It is designed to motivate students to develop the skills and persistence necessary for success in education beyond high school. Educational Talent Search is part of the federally funded TRiO program, which consists of eight programs providing opportunities for individuals to access higher education by helping them overcome a variety of barriers.

Student Support Services

Student Support Services (SSS) is a federally funded grant program that provides comprehensive academic support services that enhance students' productivity and academic success. Eligible students receive quality one on one academic advising on a regular

basis, tutorial assistance, other related academic support services and in some cases financial aid assistance. The SSS Program may also provide grant aid to currently enrolled participants who are receiving Federal Pell Grants for the current award year.

SSS offers supplemental instruction in developmental courses, personal counseling, exploration of career options, and personal career counseling and mentoring programs involving faculty, staff and/or peers. Participants will also have access, as availability permits, to a book and laptop loan program. SSS will provide assistance and support with overall adjustment to community college life.

Upward Bound

Upward Bound (UB) is a federally funded pre-college grant program designed to increase the academic skills and motivation of program participants to ensure their high school graduation and success in a post-secondary educational program. The expected outcome of the program is that participants will be in a position to successfully choose and complete a college preparatory curriculum leading to enrollment and achievement in a college, university or other post-secondary institution. This will be accomplished through a well-rounded, yearlong program designed to address the multiple needs of program participants. To that end UB has both summer and academic year components.

During the Academic Year:

- Weekly academic enrichment and tutoring sessions to assist students in the basic academic areas of math, science, writing and reading. UB also provides individual academic, career and personal advising.
- Monthly Saturday Seminars: Guest speakers are invited to discuss special topics, students participate in team building and leadership activities, and special events are planned.

During the Summer Component:

- A six-week nonresidential academic program is offered. Participants attend UB academic enrichment classes five days per week, on the campus of Columbus State Community College. Students also participate in cultural, social and recreational activities.

Tech Prep/Heart of Ohio Consortium

Claude Graves, Executive Director
(614) 837-9443

Administered by Learning Systems, Columbus State houses the Tech Prep/Heart of Ohio Consortium's central office and acts as fiscal agent. Columbus State is a founding member of the Heart of Ohio Tech Prep Consortium. Since 1992, the College and its consortium partners—50 high schools, Central Ohio Technical College, the Electrical Trades Center, two regional campuses of Ohio University, and central and southern Ohio business, industry and labor organizations—have worked together to offer high-quality college tech prep programs.

Students who choose college Tech Prep in 11th grade enter a seamless curriculum for two years of high school, moving directly into

a related associate degree program at Columbus State. Tech Prep college programs are currently available in accounting, architecture, automotive, business management, civil engineering, computer information, construction management, electro-mechanical engineering, electronic engineering, environmental science, safety and health, finance, graphic communication, interactive multimedia, law enforcement, mechanical engineering, multi-competency health, nursing, and sport and exercise studies.

K-12 Initiatives

Laurie Johns, Administrator
(614) 287-5961

The mission of the K-12 Initiatives Department is to enhance the educational opportunities for youth in Columbus State's service area, while fostering the development of lifelong learning. This department is directly responsible for the following programs at Columbus State:

Underage Student Population Enrollment Options

Allows students between the ages of 14 and 18, with or without a high school diploma, to enroll in college credit coursework. Students may be enrolled in public, private or home school institutions and are considered self-pay students. The coursework they complete may apply toward high school graduation requirements, as established by the secondary institution they are attending.

Post Secondary Enrollment Options Program

Allows students in high school to attend college and apply the college credit to their high school graduation requirements.

CPS Pathways to Success Initiative, Career Academics

Pathways for current Columbus Public High School Career Academy students to complete summer courses and enter into articulated two-year associate technical programs with advance placement.

Tech Prep Program

Pathways for current high school tech prep students to enter into articulated two-year associate degree technical programs with advance placement.

Cougar Crew Reading Literacy Tutor Program

Columbus State students and employees serve as reading literacy tutors in area elementary schools during and after school.

Enrichment Programs

Outreach for individuals and families regarding academic enrichment. Programs include Kids In College, Youth In College, Summer Youth, and Literacy Festivals.

Linkages for Primary and Secondary Education

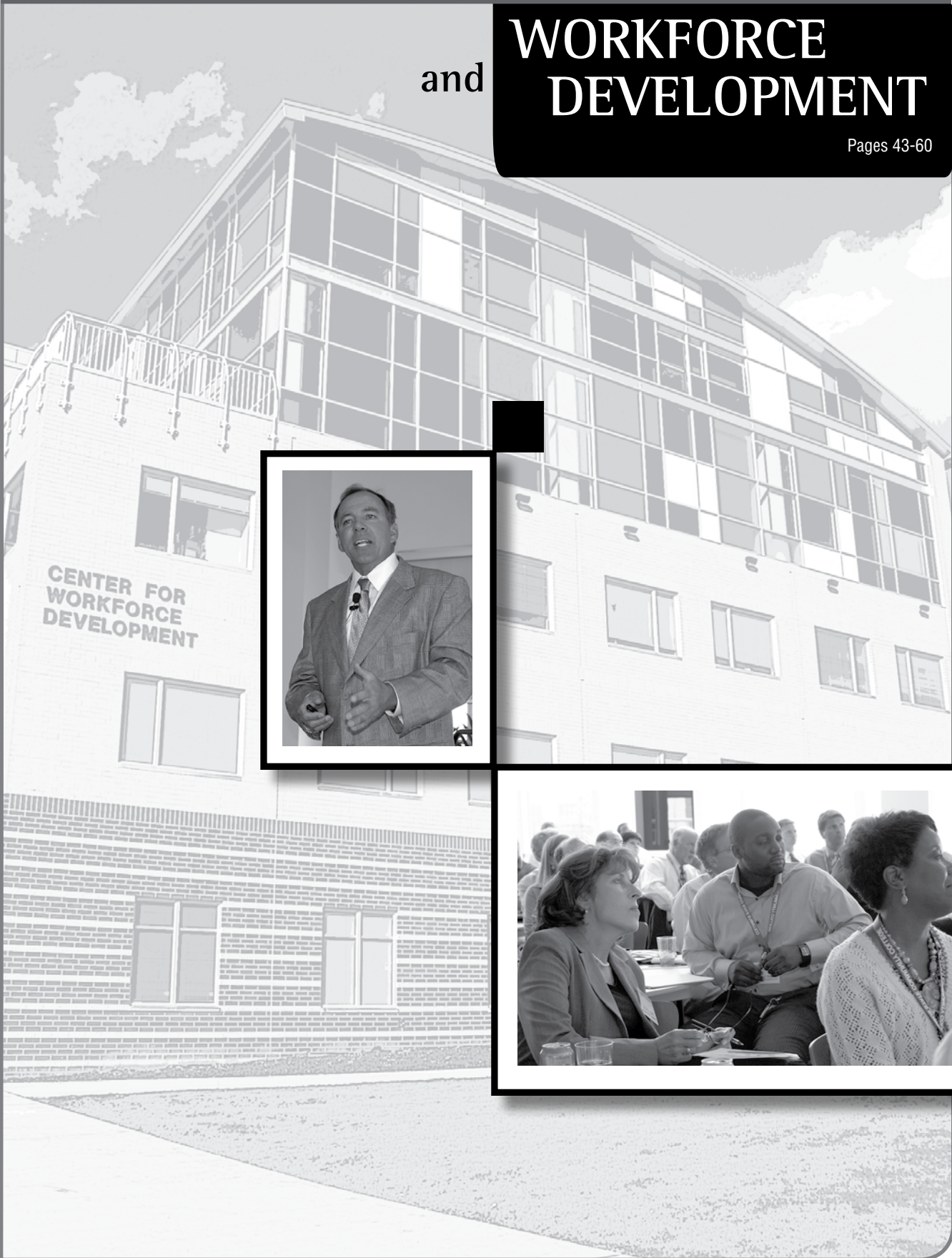
Opportunities for training and development to enhance knowledge, experiences, and practice regarding college and lifelong learning options for professionals and their students.

COMMUNITY EDUCATION

and

WORKFORCE DEVELOPMENT

Pages 43-60



Community Education and Workforce Development

Community Education and Workforce Development Dean's Office (614) 287-2511

There is an ever-increasing need for meaningful, lifelong learning for many people—those preparing to go to college, to get their first job, to advance in their current job or change careers. The Community Education and Workforce Development Division provides opportunities for students in traditional and nontraditional settings.

Each department in Community Education and Workforce Development is designed for students of varying ages, professional experience and education levels to assist in learning new skills or enhancing existing skills. Today's competitive labor market demands that employees are up to date on the latest business equipment, computer software, management techniques, professional trends, market information, computer networking, customer service, and office operations. Through Columbus State's Community Education and Workforce Development departments, students, business professionals, and new or first-time employees have the opportunity to learn many of these work-related skills at convenient times.



Business and Industry Training Services (614) 287-5000

Business and Industry Training Services provides innovative approaches to training, consulting, and education through customer-driven partnerships. Columbus State's Business and Industry Training Services can help your company assess, analyze, and target cost-effective performance consulting and business solutions tailored to the needs of your organization.

Contract Training and Consulting Services

These are a few of the contracted services that we can provide to your organization:

- Leadership and supervisory skills training
- Customer service training
- Business communications training: verbal and written communication, interpersonal skills, and team building
- Consulting services and business/organizational development programs
- Quality programs such as Lean Manufacturing and ISO certification
- End-user computer training on topics such as word processing, spreadsheets, presentations, E-mail, and Web authoring
- Industrial technology programs relevant to a variety of industries including hydraulics, pneumatics, electric motors, HVAC, and advanced manufacturing technologies
- Accounting and finance for both financial and non-financial managers
- Human Resources training
- Customized individual, small or large training built around the needs of your organization
- Job analysis and employee assessments
- Experienced personnel to coordinate and implement training
- Quality trainers, consultants and instructors

For more information and to arrange a meeting with one of our professional Training and Performance Consultants, please call (614) 287-5000 or visit our Web site at www.csc.edu.

Professional Development Seminars

Professional Development Seminars are noncredit courses meeting for one day each, from 8:30 a.m. – 4:30 p.m. Please call (614) 287-5000 or check our Web site at <http://www.csc.edu/workforce/bits/pdseminars/> for registration and information on dates and locations. The following descriptions, titles and fees are current at the time of publication but are subject to change.

Human Dynamics Programs

BIBUS 101 Accounting and Bookkeeping

Learn about major accounting functions and practices such as fixed asset accounting, cost accounting, accounting transactions and internal accounting controls.

BIBUS 102 Basic Business Statistics

Learn the fundamentals of descriptive statistics in this introductory course. This course covers measures of central tendency and measures of variation, and gives special emphasis to the development and interpretation of graphs.

BIPDV 101 Brain Power 1

Learn recent breakthroughs about how your brain works and powerful new techniques that enable you to get through materials faster, comprehend better, and retain more. Double your present reading speed and retention rate to cut through materials and have information at your fingertips.

BIPDV 111 Brain Power 2

Build on what you learned in Brain Power 1 to take your skills to advanced levels. Learn advanced reading techniques to increase your reading speed 3–4 times your initial rate, to be more successful in managing the change in your life, and to rewire your brain for success.

BIPDV 310 Change Happens!

Develop the business skills needed to implement change more quickly and effectively. Learn about the Four Stages of Change and identify possible challenges. Develop proactive practices to increase acceptance and help others through a smoother change transition.

BISFT 109 Conducting Effective Interviews

This seminar, intended for managers, will develop the skills, knowledge and processes to interview and hire key performers. Information concerning legal considerations, interviewing skills, and hiring candidates will also be covered.

BISFT 101 Confronting Effectively: Controlling the Escalation of Conflict

Do you boil inside when you know you should speak up? Do you avoid certain people even when you need to work with them? Most conflicts can be resolved in a way that benefits all concerned. Participants will leave this seminar with a personal plan of action to help effectively and proactively address conflicts in the work environment.

BIBUS 103 Effective Presentations

Public speaking is said to be the number one fear of American adults. This course will help overcome that fear by teaching participants how to make successful group presentations in formal or informal settings. At the conclusion of this seminar, attendees will know how to plan and prepare a presentation, how to make a presentation, and how to appraise their own levels of self-confidence in public speaking. Opportunities to practice making a presentation will be offered.

BILNG 601 Embracing Diversity

Diversity training isn't just about legal compliance. Understanding diversity helps you improve relationships with coworkers, customers, vendors, and the general public.

BIPDV 201 Emotional EQ

Learn about a different kind of smart: Emotional Intelligence. Self-management, control, self-motivation, and managing emotions in the workplace are just a few of the topics that will be covered in this course.

BILNG 602 Generational Differences in the Workplace

Today's workforce is comprised of several very different generations who often have varying perceptions and expectations about work. During this seminar students will learn how to increase generational harmony by understanding differences and learning how to modify or adapt expectations.

BIPDV 301 Goal Setting

Participants will learn to set personal and career goals.

BIBSC 101 Grammar for the Workplace

Who or whom? Who, which, or that? Which word is correct in the context of a particular sentence? This course covers parts of speech, sentence structure, punctuation, capitalization, and proper grammar usage.

BIBUS 105 Grants Writing

Grants Writing gives an overview of the grants writing process from visioning through the proposal submission. This course will help participants locate and identify grant opportunities, analyze submission guidelines, and prepare a winning proposal.

BISFT 102 How to Excel in Customer Service

Learn to recognize and anticipate customer expectations, identify elements of emotional response that interfere with good customer service, and develop communication skills that defuse customer complaints.

BISFT 110 Interviewing Skills: Put Your Best Foot Forward

This seminar, intended for employees, will help make the next job interview successful. Learn how to present a professional image, research the interviewing organization, polish interpersonal skills to make a great impression, and write appropriate follow-up correspondence.

BISFT 104 Listening and Memory Development

Listening vs. hearing, becoming an effective listener, and useful memory techniques are the focuses of this course. Improving listening and memory skills can enhance success in one's personal and professional life.

BISFT 105 Managing Relationships at Work

Learn to communicate effectively in an organizational setting with all types of people.

BIPDV 302 Managing Time and Work

This course provides valuable tools and techniques to set priorities, manage time, and overcome procrastination.

BIBUS 106 Office Organizational Skills

No more misplaced documents! Organizing the workplace can make work easier and more efficient. Techniques taught will help participants manage the endless flow of paperwork.

BISFT 106 Problem Solving and Decision Making

Learn how to identify different problem-solving styles that look at the whole picture, not just the task at hand. This course helps develop creativity, efficiency, and critical thinking to solve everyday problems.

BIBUS 107 Project Planning and Management Fundamentals

Focusing on effective project management, this introductory course presents tools to define, plan, implement, and evaluate projects.

BIBUS 108 Proofreading and Editing Techniques

Learn effective proofreading and editing techniques in this hands-on seminar. Course details proofreader's marks used to indicate text and layout changes. This class also covers basic grammar rules including punctuation, sentence structure, and style.

BIBUS 111 Report and Proposal Writing

Learn to analyze report and proposal requirements and prepare reports that address the readers' needs regarding content and writing style.

BIPDV 303 Stress Management

Learn to cope with stress by identifying stress initiators and turning them into powerful drivers for change and accomplishment.

BIBUS 110 Technical and Procedural Writing

Learn basic techniques of technical writing to successfully convey a message using a minimum number of words and images. The elements of style and usage in step-by-step writing, how to assemble material, and how to write a technical report are covered.

BISFT 107 Train the Trainer (Critical Events for Training Success)

Employees may be called upon to develop and deliver training for customers, coworkers, or suppliers. This course will introduce the tools and techniques involved in conducting effective training.

BISFT 108 Working with Difficult People

Why do some people hit it off and not others? Learn to use a behavior style model to build the skills to deal with difficult people.

BIBUS 109 Writing for Business: Level 1

Learn how to communicate more effectively using clear, concise writing techniques and appropriate language for business communications. Other topics include active vs. passive voice and how to write effective memos.

BIBUS 112 Writing for Business: Level 2

Building on the skills gained in the prerequisite course, Writing for Business Level 1, students will develop additional skills in proofreading, editing, memo organization and audience analysis.

Computer User Programs

BICPT 101 Introduction to Microsoft Windows

Learn the skills required to use a computer equipped with Microsoft Windows. Students will learn how to customize a desktop, use the taskbar, manage files and folders, and work with documents.

BICPT 111 Advanced Microsoft Windows

This class covers six advanced interactive units that will help participants share information between programs, maintain a computer, create back-up disks, and manage a hard drive.

BICPT 401 Introduction to the Internet

This course explores the basic technologies of the Internet and the World Wide Web: Internet fundamentals, navigating the Web searching the Internet, exploring newsgroups, and customizing a browser.

BICPT 402 Internet Research

The World Wide Web is a huge repository of information stored on hundreds of thousands of computers scattered across the globe. Finding tons of information is often easier than finding the right information. This course presents the techniques and strategies to locate the desired information.

BICPT 801 Adobe Acrobat Professional

Learn to convert and combine proposals, presentations, images and other documents into one compact PDF file using Adobe Acrobat. Students will learn how to use annotation, linking, and bookmarking tools to create notes, as well as how to use dynamic date-time stamps as well as file viewing and navigation aids.

BICPT 802 Adobe Photoshop CS2

To be successful in this course, students should have a knowledge or understanding of the following: color palettes and color models such as RGB and CMYK; the differences between raster formats such as GIF or JPG and vector formats such as EPS; and prior experience with draw tools including stroke, fill, and bezier curves. This class meets for two sessions.

BICPT 404 Dreamweaver MX

Dreamweaver, a powerful Web authoring package, is the choice of Web development professionals and others who want to go beyond the basic capabilities of tools like FrontPage. This introductory course will help you get started with Dreamweaver to create a basic Web site complete with links, images, formatting, style sheets and tables. To ensure success, students should have a basic knowledge of HTML markup including structure and formatting tags. Understanding of file management, particularly directory trees, is also an important prerequisite. This class meets for two sessions.

BICPT 405 Introduction to Flash MX

Learn how to create multimedia Web pages in this introductory course. Students will learn how to use color and shapes creatively, how to manipulate images and text, how to modify layers, and how to create simple animations.

BICPT 425 Advanced Flash MX

Advanced Flash MX is designed to teach experienced users how to animate symbols and shapes with actions and ActionScript, create forms, and integrate sound and video. This course will also demonstrate how to publish and test movies on the Web.

BICPT 703 Quickbooks Pro

Learn this new software that can share data with more than 60 programs. This software offers a full set of accounting features including payroll, credit card authorization, and inventory capabilities.

BICPT 702 Introduction to ACT! 6.0

ACT! 6.0 enables users to track and manage information about personal business contacts, such as addresses, telephone numbers and appointments. In addition users can create letters, memos, and fax cover pages; send e-mail and faxes; and dial telephone numbers. This introductory seminar will allow students to become familiar with the basic capabilities of ACT! 6.0.

BICPT 121 Overview of Microsoft Office

This course presents the basic features of Word, PowerPoint, Excel, Access, FrontPage, and Outlook.

BICPT 501, 301 Introduction to Word

In this introductory course, students will learn how to create, edit, open, save and print documents; format characters and paragraphs; create and format tables; set margins; create headers and footers; and check spelling.

BICPT 511, 311 Intermediate Word

Learn to use Word more effectively in this intermediate course. Students will learn how to create multiple columns, apply borders and shading to tables, utilize styles and templates to automate formatting, insert and format graphics and drawings, and print envelopes and labels.

BICPT 521, 321 Advanced Word

Take productivity to a higher level by mastering advanced Word tools and techniques such as forms, form letters, mail merges, macros, and revision marking.

BICPT 502, 302 Introduction to Excel

Students will learn how to create, edit, open, save and print workbooks; enter data, formulas, and functions; use absolute and relative references; format cells; and insert charts.

BICPT 512, 312 Intermediate Excel

Learn to use Excel more effectively in this intermediate course. Students will learn how to work with lists, link and consolidate worksheets, create combination charts, sort and filter lists, and use advanced formatting.

BICPT 522, 322 Advanced Excel

Shift productivity into high gear with advanced Excel tools and techniques such as PivotTables, PivotCharts, Goal Seek, macros, database functions, and external database queries.

BICPT 503, 303 Introduction to PowerPoint

Students will learn how to create, edit, open, save and print presentations; format text; add, rearrange, and delete slides; use templates; utilize slide masters; insert tables, charts, and clip art; check spelling; and deliver presentations.

BICPT 513, 313 PowerPoint Sales Presentations

The intermediate course expands on the skills and concepts in the introductory course. Students will learn how to plan presentations, set transitions, use sound and video, work with AutoShapes and pictures, and publish presentations to the Web.

BICPT 523, 323 Advanced PowerPoint

Boost productivity with advanced PowerPoint tools and techniques such as custom presentations, animations, special effects, multimedia, and integration with other Microsoft Office applications.

BICPT 504, 304 Introduction to Access

Students will learn basic database concepts and how to plan, design, and create a database; work with fields and records; create and execute queries; create and use forms; and create and use reports.

BICPT 514, 314 Intermediate Access

Learn to use Access more effectively in this intermediate course. Add to conceptual knowledge by learning how to normalize and implement referential integrity. In addition, students will learn how to relate tables, create advanced queries, add graphics and calculations to forms and reports, and add charts.

BICPT 524, 324 Advanced Access

Master Access advanced tools and techniques such as PivotTables, PivotCharts, advanced forms, macros, Access SQL, and Internet integration.

BICPT 601 Introduction to Project

This introductory course provides the skills necessary to organize the tasks involved in the completion of a project, monitor the progression of projects, and make the best use of time, money and resources.

NOTE: In addition to the basic tools and techniques of MS Project, this course will reinforce theories and topics presented in the Project Planning and Management Fundamentals seminar.

BICPT 621 Advanced Project

Master Project advanced tools and techniques such as baselines, hyperlinks, drawing tools, reports, consolidating multiple projects, and sharing resources across projects.

NOTE: In addition to the tools and techniques of MS Project, this course will reinforce theories and topics presented in the Project Planning and Management Fundamentals seminar.

BICPT 205 Microsoft Outlook

Have e-mail but don't know how to manage its capabilities? This introductory course offers students the skills to create and customize a message, work with attachments, use mail management tools, and work with the electronic calendar.

BICPT 503, 403 Microsoft FrontPage Web Page Design

In this introductory course, participants will learn how to create a basic Web site. Topics include selecting themes, creating new Web pages, formatting characters and paragraphs, creating lists, adding graphics, inserting tables, creating links to other pages, and creating navigation aids. This class meets for two sessions.

Certification Programs

Advanced Manufacturing Skills

Integrated Systems Technology training helps companies fill high-tech jobs. Integrated Systems Technology (IST) programs cross-train individuals in electrical, electronic, and mechanical systems. Graduates leave with entry-level knowledge of operating, troubleshooting, and maintaining the high-tech equipment found in today's manufacturing environments. IST is proven successful in offering hands-on training, industry-standard equipment and experience, and industry-driven curricula.

Pharmacy Technician Program

This noncredit program prepares students to enter the pharmacy field in hospitals, home-infusion pharmacies, mail-order pharmacies, or community pharmacies as a technician working under the supervision of a registered pharmacist. This course will also prepare the student to take the Pharmacy Technician National Certification Exam.

The course is taught by local registered pharmacists who are members of the part-time faculty of Columbus State Community College.

Key topics covered

- Medical terminology specific to the pharmacy industry
- Reading and interpreting prescriptions
- Defining drugs by generic and brand names
- Dosage calculations
- Methods of I.V. therapy and aseptic technique
- I.V. flow rates
- Drug compounding
- Dose conversions
- Dispensing of prescriptions
- Unit dose
- Inventory control
- Billing and reimbursement

This course is offered four times per year and meets 2.5 hours per session, two days per week, over a 10-week period, for a total of 50 contact hours. For more information on current offerings, locations, and pricing, please call (614) 287-5000 or check our Web site at <http://www.csc.edu/workforce/pharmtech/index.htm>.

15-hour ServSafe Certification Course

A detailed study of the HACCP (Hazard Analysis Critical Control Points) procedure, which includes the control of bacteria, materials handling, and safety practices to maintain a safe and healthy environment for the consumer and employees in the food, lodging, and healthcare industries. The course includes an examination of laws and regulations related to food safety and sanitation.

Designed for employees and individuals who may be in charge of the operation at a given time, this 15-hour noncredit course is based on the *ServSafe Essentials* textbook. The text will be mailed to the students with pre-class reading assignments two weeks prior to class. Topics that are included in the text and reinforced in the class are:

- The "how and why" of providing safe food
- Microorganisms that cause problems in food
- Personal hygiene
- Purchasing, receiving, storing, preparing, and serving safe food
- Principles of the HACCP system
- Kitchen sanitation and pest management
- Food service rules, regulations, and laws

Upon successful completion of an examination from the National Restaurant Association Educational Foundation, students will receive certificates from Columbus State Community College, the National Restaurant Association Educational Foundation, and the State of Ohio Department of Health. *This certification satisfies Ohio House Bill 223 for persons who may be in charge of the operation at any given time.*

Department of Continuing Professional Education

Frederick L. Baker, Administrator
(614) 287-5997

Continuing Professional Education provides a variety of professionals with continuing education through noncredit courses and seminars designed to meet their licensing and certification needs. The department also offers a variety of seminars and courses for those who need continuing education credits (CEUs) to stay current in their field, and for those seeking personal enrichment through life-long learning. All courses and seminars offered by C.P.E. are open to anyone who has an interest in the program. To access the department Web site, visit www.csc.edu, click on "Community Education and Workforce Development," then "Continuing Professional Education."

The Columbus State ACT/SkillsMax Center for Community Education and Workforce Development

The ACT/SkillsMax Center offers many opportunities to the community Columbus State serves using distance training, assessment, and testing to assist customers of the center to meet their personal

or professional goals. Distance training is available featuring the following subject areas:

- Adult Literacy
- Computer Basics
- Industrial/Tech Safety Skills
- Information Technology (Intermediate and Advanced Computer Skills)
- Management/Leadership
- Personal Development

Users of online training can access courses through the Columbus State Web site. Instructions for purchasing courses are on the ACT Web site.

Server-based courses are provided at the CSCC ACT/SkillsMax Center and can be delivered to the individual or on an instructor-facilitated basis.

Assessments that are offered include WorkKeys, Discover, DISC, and SHR. These assessments can be given either by individual appointment or on a contract basis at the ACT/SkillsMax Center or on site, depending on the assessment tool requested. The center is a VUE, PROMETRIC and ETS testing site for various skill certifications such as CISCO, MOUS, MCSE, NET+, etc., and offers proficiency testing for CLEP. These tests are given by appointment. **The ACT high school assessment is currently not offered.**

Costs for these courses and services vary. Contact the Columbus State Community College ACT/SkillsMax Center for Community Education and Workforce Development at 614/287 ACT1 or e-mail the center at act1@cscce.edu.

The Lifelong Learning Institute (LLI)

The mission of the Lifelong Learning Institute of CSCC is to provide educational opportunities for mature learners in central Ohio to broaden and extend their knowledge, share their life experiences, become more attuned to community resources, and interact with other “lifelong learners.” Peer-led and membership-driven, the LLI offers courses and special events that focus on the arts, literature, philosophy, science, languages, technology, spirituality, economics, and local, national, and world affairs.

Launched in July 2004, the Institute offers a year-round menu of two-, three-, and four-week courses in September, January, April and July. “Coffee and Conversation” events and Symposia are offered in other months (except October) in partnership with several central Ohio locations, including senior residence facilities and arts organizations.

LLI membership is open to all who are interested. The annual membership fee provides access to any or all scheduled offerings from September 1st to August 31st. Individual courses or events are open to non-members for a per-event fee.

Contacts for Continuing Professional Education at Columbus State are:

- Frederick L. Baker, J.D., Administrator
fbaker@cscce.edu
- Lisa Kesig, Senior Office Assistant
lkesig@cscce.edu
- Tracy La Mar, for departmental fiscal activities
tlamar@cscce.edu
- David Watts, Coordinator, technical and computer courses, dwatts@cscce.edu
- Rashaun Geter, Coordinator, LLI and general continuing education courses, rgeter@cscce.edu
- Ellen Neutzling, Coordinator, ACT/SkillsMax Center, eneutzli@cscce.edu ,
- Deborah Lyons, ACT/SkillsMax
dlyons@cscce.edu, 614/287-ACT1(2281)

Continuing Professional Education Course Descriptions

With the rapid changes in technology and work methods, many employers and employees seek continuing education classes to stay current in careers and job skills. Continuing Professional Education has several groupings of courses identified as the Continuing Professional Education Certificate Series. The department is a CISCO Networking Academy, offering courses in the CCNA and CCNP Certificate process, and delivering courses in C-Tech copper, fiber and telecommunications cabling. We are a member of the SHRM Learning System and the American Payroll Association PPS system. C.P.E. is also a provider of continuing education in a variety of health care professions including the Ohio Social Worker and Counselor Board.

If you are interested in completing a series for a certificate, contact Continuing Professional Education at (614) 287-5997.

CPEB: Business/Office Administration/Office Assistant

CPEC: Computer/Technology

CPEE: Engineering/Safety

CPEG: General

CPEH: Health/Allied Health

CPEL: Legal

CPEM: Language Courses

CPES: Personal Enrichment/Seminar

Alternative Dispute Resolution Specialist

CPEL 109 - Trends in Alternate Dispute Resolution

The purpose of Trends in Alternate Dispute Resolution is to examine the history of dispute resolution and the statutory/judicial establishment of alternative dispute resolution as a method used for disposal of civil disagreements. The evolution and development of ADR and the growth and impact of the alternative system on

American jurisprudence and everyday society is evaluated. As this is an introductory course, the student will examine the process of ADR, current trends of ADR, its acceptance by the legal environment, business, society, and its use in the global economy.

CPEL 110 - The Arbitration Process

The Arbitration Process is an intensive examination of arbitration and the process for accomplishing dispute resolution through this forum. Students will explore both court annexed arbitration and private arbitration processes. Researching arbitration decisions and the use of legal resources in the arbitration process will be explored. Use of databases and the Internet will be included in the development of research techniques. Students will be able to conduct an arbitration at the completion of the course.

CPEL 111 - The Process of Mediation

The Process of Mediation is an overview of the mediation principles and process. Students will explore statutory and private mediation procedures. The course will concentrate on mediation for domestic relations, employment practices, and labor issues. Additionally, the student will be exposed to different models of mediation with particular emphasis on the Seven Step model. Methods of researching decisions and various legal resources utilized in mediation procedures are examined, including computer databases and the Internet. Students will be able to conduct a mediation at the completion of the course.

CPEL 112 - ADR – Methods of Negotiation and Resolution

This course will introduce the student to techniques used to achieve successful negotiation of disputes. Students will be introduced to principles of negotiation and will learn how to properly and effectively use the mechanics of client interviewing, recognize non-verbal cues, and define and analyze descriptions of conflicts. Methods of resolving conflicts through an evaluation of various successful negotiation strategies will be explored and applied.

CPEL 113 - Alternative ADR Procedures

ADR methods and procedures, other than arbitration and mediation, which are statutorily created and privately contracted in the resolution of business disputes, is the focus of Alternative ADR Procedures. Hire-A-Judge, Summary Jury Trial, mini-trials, and international ADR methods will be explored for appropriateness of use in a given conflict. Students will be able to prepare forms and summaries required to complete these various ADR processes.

Workers' Compensation Specialist

CPEL 128 - The Process of BWC Claims

This course will acquaint the student with how the Bureau of Workers' Compensation processes claims, including how the bureau works with companies that are self-insured, the calculation of wages and compensation, payment of medical bills, authorization of medical treatment, determination of disability, as well as how the bureau addresses appeals of decisions, applications to reactivate, and permanent partial disability settlements in the resolution process.

CPEL 130 - The Workers' Compensation Adjudication Process

The Workers' Compensation Adjudication Process is designed to acquaint the student with how the Bureau of Workers' Compensation works with contested claims. The course will examine the adjudication of claims process from the claimant position, as well as that of the employer and the bureau. The emphasis of this course is how to conduct discovery and acquire information available through state files and computer systems and procedures for adjudicating a claim through an administrative hearing. Violations of specific safety requirements, applications for permanent total disability, and the hearing and appeals process will be addressed.

CPEL 131 - Rating the Workers' Compensation Risk

This course is designed to acquaint the student with how the Bureau of Workers' Compensation determines a premium based on an employer's risk factors. Different rating plans available through the bureau to establish appropriate premiums are discussed, as well as appeals available to an employer who contests a rating assigned. The emphasis is on the underwriting process of the bureau; however, the self-insured options available are addressed.

CPEL 132 - BWC Practice and Procedure

BWC Practice and Procedure is an in-depth examination of the procedures necessary to request and complete the hearing process in a claim made to the Bureau of Workers' Compensation. The practice and procedures are examined from both the bureau (internal) and claimant or employer (external) perspective. At the completion of the course, the student will be familiar with the procedures required to practice in the BWC and will further be able to initiate and conclude or defend a claim made to the bureau.

LEGAL

CPEL 105 - Technology in Professional Research

Technology in Professional Research will introduce students to the concepts of and use of technology in professional research. Students will use various resources to research and retrieve information relevant to their specific professional arena. Remote databases, CD-ROM, and the Internet will be addressed, as well as a review of basic computer literacy. The course will be delivered in computer labs, providing each student with a computer station to use in each session, as well as instruction through local and remote connections using LCD overhead projection. The student will be acquainted with Internet user groups where questions are asked and answered via e-mail and listservs. The goals of the course are to provide students with computer competencies that exceed the basics with confidence to be pro-active in the use of technology within the profession and to develop creative thinking skills.

CPEL 140 - Basics of Legal Research

Basics of Legal Research is an overview of the tools used by legal professionals to research statutes and case law. The course is designed for both persons who have little or no experience in the law or legal related fields as well as those who are employed in a legal environment.

CPEL 142 - Legal Terminology

Legal Terminology is a basic legal vocabulary course designed to acquaint students with little or no experience in the legal environment to terminology commonly used by legal professionals.

CPEL 143 - Computer Literacy for Legal Professionals

Computer Literacy for Legal Professionals acquaints the student with computer applications commonly used in legal research. A basic understanding of legal research material and traditional legal research methods is necessary.

In addition to these certifications, Continuing Professional Education offers Probate, Credit, Real Estate, and Elder Law programs.

GRANT WRITING

CPEG 114 - Beginning Grant Writing

Beginning Grant Writing shows how to find grants to fund a project, how to determine the most appropriate funding source, and how to write a basic response to requests for proposals for funding.

CPEG 115 - Advanced Grant Writing

Advanced Grant Writing examines how to draft responses to proposals for funding projects so documentation will provide the best chances for grant approval. This course builds upon the basics of grant writing discussed in Beginning Grant Writing, with hands-on experience and expert feedback. A variety of methods used to draft RFP's will be explored.

SIGN LANGUAGE

CPEG 102 - Basic Sign Language – The ABCs

Learn how to communicate effectively with the hearing impaired. Basic Sign Language – The ABCs is an overview of the fundamentals of ASL and offers the basic skills needed to communicate using sign language.

CPEG 103 - Intermediate Sign Language

Intermediate Sign Language is the second course in the ASL series and builds on the skills developed in Basic Sign Language. Students increase their effectiveness in communicating with the hearing impaired by further developing signing abilities with this interactive skill building class.

LANGUAGE INSTITUTE COURSES

CPEM 101 - Introduction to French Language and Culture

In this course, students will learn the basic conversational vocabulary, phrases, and cultural information about the French-speaking world.

CPEM 102 - Introduction to Italian Language and Culture

In this course, students will learn the basic conversational vocabulary, phrases, and cultural information about the Italian-speaking world.

CPEM 103 - Introduction to German Language and Culture

In this course, students will learn the basic conversational vocabulary, phrases and cultural information about the German-speaking world.

CPEM 104 - Introduction to Arabic Language and Culture

In this course, students will learn the basic conversational vocabulary, phrases, and cultural information about the Arabic-speaking world.

CPEM 105 - Introduction to Spanish Language and Culture

In this course, students will learn the basic conversational vocabulary, phrases, and cultural information about the Spanish-speaking world.

CPEM 106 - Introduction to Japanese Language and Culture

In this course, students will learn the basic conversational vocabulary, phrases, and cultural information about the Japanese-speaking world.

CPEM 108 - Spanish for Landscaping

This course provides a foundation in the Spanish language with a focus on conversational words and phrases needed in the landscaping and groundskeeping fields. It is offered regularly on the Columbus State campus and can be presented at other sites to a group by agreement.

CPEM 113 - Spanish for Health Care 1

This course provides a foundation in the Spanish language with a focus on health-care vocabulary, including parts of the body, names of conditions and operations, directions, symptoms, and questions and answers. Courses can provide Continuing Education Credit for nurses and social workers. Spanish for Health Care 1 is offered quarterly on the Columbus State campus and can be presented at other sites to a group by agreement.

CPEM 114 - Spanish for Health Care 2

This second-level Spanish course focuses on health-care vocabulary and conversational ability. Courses can provide Continuing Education Credit for nurses and social workers. Spanish for Health Care 2 is offered quarterly on the Columbus State campus and can be presented at the other sites to a group by agreement.

CPEM 115 - Introduction to Somali Language and Culture

In this course, students will learn basic conversational vocabulary, phrases, and cultural information about the Somali-speaking world.

COMPUTER SKILLS

CISCO Academy

The Cisco Academy for CCNA (Cisco Certified Network Assistant) consists of a 4-course curriculum designed to teach the student the basics of computer network systems, and to prepare them to sit for the Cisco Certification Exam for CCNA status. At the completion of the Academy, the student will be able to assist network engineers in the design, development, installation, and implementation of a

variety of network systems. Each class is 70 clock hours in length for a total of 280 clock hours of a combination of lecture and lab. The curriculum is available for either credit or noncredit.

Course Objectives

The CCNA certification indicates knowledge of networking for the small-office, home-office (SOHO) market and the ability to work in small businesses or organizations whose networks have fewer than 100 nodes. A CCNA certified individual can:

- Install and configure Cisco switches and routers in multi-protocol internetworks using LAN and WAN interfaces
- Provide Level 1 troubleshooting service
- Improve network performance and security
- Perform entry-level tasks in the planning, design, installation, operation and troubleshooting of Ethernet, TCP/IP Networks.

CPECPT 210 Cisco CCNA 1–Networking Basics

CCNA 1: Networking Basics is the first of the four courses leading to the Cisco Certified Network Associate (CCNA) designation. CCNA 1 introduces Cisco Networking Academy Program students to the networking field. The course focuses on network terminology and protocols, local-area networks (LANs), wide-area networks (WANs), Open System Interconnection (OSI) models, cabling, cabling tools, routers, router programming, Ethernet, Internet Protocol (IP) addressing, and network standards.

In addition, instruction and training are provided in the proper care, maintenance, and use of networking software, tools, and equipment and all local, state, and federal safety, building, and environmental codes and regulations. CCNA 1 is an integral step towards achieving CCNA Certification.

Upon completion of this course, students will be able to perform tasks related to:

- Networking Mathematics, Terminology, and Models
- Networking Media: copper, optical, and wireless
- Cable testing and cabling LANs and WANs
- Ethernet Operation and 10/100/1000/10 G versions of Ethernet
- Ethernet Switching
- IP Addressing, Subnetting

CPECPT 211 Cisco CCNA 2–Routing Basics

CCNA 2: Routers and Routing Basics is the second of four CCNA courses leading to the Cisco Certified Network Associate (CCNA) designation. CCNA 2 focuses on initial router configuration, Cisco IOS Software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Students will develop skills on how to configure a router, managing Cisco IOS Software, configuring routing protocol on routers, and set the access lists to control the access to routers. CCNA 2 is an integral step towards achieving CCNA Certification.

Upon completion of this course, students will be able to perform tasks related to:

- Routers and their role in WANs
- Cisco IOS
- Router Configuration
- Router File Management
- RIP and IGRP Routing Protocols

- TCP/IP Error and Control Messages
- Router Troubleshooting
- Intermediate TCP
- Access Control Lists

CPECPT 212/213 Cisco CCNA 3 and 4 – Switching Basics, Intermediate Routing and WAN Technologies

CCNA 3: Switching Basics and Intermediate Routing is the third of four courses leading to the Cisco Certified Network Associate (CCNA) designation. The course focuses on advanced IP addressing techniques (Variable Length Subnet Masking [VLSM]), intermediate routing protocols (RIP v2, single-area OSPF, EIGRP), command-line interface configuration of switches, Ethernet switching, Virtual LANs (VLANs), Spanning Tree Protocol (STP), and VLAN Trunking Protocol (VTP). Particular emphasis is given to students being able to demonstrate the ability to apply learnings from CCNA 1 and 2 to a network and to be able to explain how and why a particular strategy is employed. CCNA 3 and 4 are integral steps towards achieving CCNA Certification.

Upon completion of Cisco CCNA 3, students will be able to perform tasks related to:

- Variable Length Subnet Masking (VLSM)
- Intermediate routing protocols (RIP v2, single-area OSPF, EIGRP)
- Switching Concepts
- Switches
- Switch Configuration
- Spanning Tree Protocol (STP)
- Virtual LANs (VLANs)
- VLAN Trunking Protocol (VTP)

CCNA 4: WAN Technologies is the last of four courses leading to the Cisco Certified Network Associate (CCNA) designation. The course focuses on advanced IP addressing techniques (Network Address Translation [NAT], Port Address Translation [PAT], and DHCP), WAN technology and terminology, PPP, ISDN, DDR, Frame Relay, network management, and introduction to optical networking. Particular emphasis is given to students being able to demonstrate the ability to apply knowledge from CCNA 1, CCNA 2, and CCNA 3 to a network and to be able to explain how and why a particular strategy is employed. In addition, the student will prepare for taking the CCNA Exam. CCNA 4 is an integral step towards achieving CCNA Certification.

Upon completion of Cisco CCNA 4, students will be able to perform tasks related to:

- Network Address Translation (NAT) and Port Address Translation (PAT)
- Dynamic Host Configuration Protocol (DHCP)
- WAN Technologies
- Point-to-Point Protocol (PPP)
- Integrated Services Digital Network (ISDN)
- Dial-on-Demand Routing (DDR)
- Frame Relay
- Network Management
- Optical Networking

CPECPPT 214 Cisco CCNP 1–Advanced Routing

Advanced Routing is the first of four courses leading to the Cisco Certified Network Professional (CCNP) designation. CCNP certification indicates knowledge of networking for the small-office, home-office (SOHO) market and enterprise markets and the ability to work in businesses or organizations whose networks have between 100 and 500 nodes. A CCNP certified individual should be able to:

- Implement appropriate technologies to build a scalable routed network
- Build campus networks using multilayer switching technologies
- Improve traffic flow, reliability, redundancy, and performance for campus LANs, routed and switched WANs, and remote access networks
- Create and deploy a global intranet
- Troubleshoot an environment that uses Cisco routers and switches for multiprotocol client hosts and services
- Perform entry-level tasks in the planning, design, installation, operation and troubleshooting of Ethernet, TCP/IP networks.

CCNP 1 introduces Cisco Networking Academy Program students to scaling IP networks. Students learn to use VLSM, private addressing, and NAT optimize IP address utilization.

The majority of the course content related to learning how to implement the RIPv2, EIGRP, OSPF, IS-IS, and BGP routing protocols. In addition, the course details the important techniques used for route filtering and route redistribution. CCNP 1 is an integral step towards achieving CCNP Certification.

Upon completion of this course, students will have performed tasks related to:

- Internetwork scalability
- Advanced IP addressing techniques
- Routing protocol operation, configuration, and troubleshooting
- RIPv2, EIGRP, OSPF, IS-IS, BGP
- Route optimization

CPECPPT 215 Cisco CCNP 2–Remote Access

CCNP 2: Remote Access is the second of four courses leading to the Cisco Certified Network Professional (CCNP) designation. CCNP 2 introduces student to the implementation of Cisco routers in WAN applications. The course focuses on the selection and implementation of the appropriate Cisco IOS services required to build intranet remote access links. Students will develop skills with the specific WAN technologies of analog dialup, ISDN BRI and PRI, Frame Relay, broadband, and VPN. This hands-on, lab-oriented course stresses the design, implementation, operation, and level 1 troubleshooting of common WAN connectivity options. CCNP 2 is an integral step towards achieving CCNP Certification.

Upon completion of this course, students will have performed tasks related to:

- WANs
- Modems and asynchronous connections
- PPP and serial connections
- ISDN BRI and PRI and DDR

- Frame Relay configuration and traffic shaping
- WAN backup, managing and optimizing traffic
- NAT and AAA
- Broadband connections
- VPNs

CPECPPT 216 Cisco CCNP 3–Multilayer Switching

CCNP 3: Multilayer Switching is the third of four courses leading to the Cisco Certified Network Professional (CCNP) designation. CCNP 3 introduces students about the deployment of the state-of-the-art campus LANs. The course focuses on the selection and implementation of the appropriate Cisco IOS services to build reliable scalable multilayer-switched LANs. Students will develop skills with VLANs, VTP, STP, inter-VLAN routing, multilayer switching, redundancy, Cisco AVVID solutions, QoS issues, campus LAN security, and emerging transparent LAN services. This hands-on, lab-oriented course stresses the design, implementation, operation, and troubleshooting of switched and routed environments. CCNP 3 is an integral step towards achieving CCNP Certification.

Upon completion of this course, students will have performed tasks related to:

- Campus Networks and Design Models
- VLANs and VTP
- STP
- InterVLAN Routing
- Multilayer Switching
- Redundancy
- AVVID
- QoS
- Security
- Transparent LAN Services

CPECPPT 217 Cisco CCNP 4–Network Troubleshooting

CCNP 4: Network Troubleshooting is the last of four courses leading to the Cisco Certified Network Professional (CCNP) certification. CCNP 4 teaches students about the troubleshooting network problems. This course focuses on troubleshooting network problems. The course focuses on the documenting and baselining a network, troubleshooting methodologies and tools, and Layers 1 to 7 troubleshooting. CCNP 4 is an important step toward achieving CCNP certification.

Upon completion of this course, students will be able to perform tasks related to the following:

- Documenting and Baselining the Network
- Troubleshooting Methodologies and Tools
- Layer 1-7 Troubleshooting

CPECPPT 220–A+ Certification

The A+ Certification course is a hands-on, entry-level 5–7-week course teaching basic PC hardware and Windows software support, including installing memory, swapping hard drives, and troubleshooting the Windows operating system. Earning A+ Certification opens the door to the IT field and helps individuals qualify for positions such as PC/LAN technician, help desk, and support technician.

CPECPT 234 Cisco IT Essentials I–A+

IT Essentials I

Students learn the functionality of hardware and software components as well as suggested best practices in maintenance and safety issues. The students, through hands on activities and labs, will learn to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, an introduction to networking is included with this course. This course helps students prepare for CompTIA's A+ certification.

Course Objectives

Upon successful completion of this course, the student will receive a Certificate of Completion for IT Essentials I: PC Hardware and Software. Acquired competencies include the following:

- Build, configure, upgrade, and maintain a personal computer system
- Diagnose and resolve problems of a personal computer system
- Install and configure various computer peripheral devices
- Setup, configure, and maintain a local area network
- Resolve network connectivity problems on a local area network using a systematic troubleshooting approach
- Install, configure, upgrade, and maintain Microsoft Windows operating systems
- Diagnose and resolve problems using Microsoft Windows system tools
- Understand the specialized functions of the network server and the conditions required for a secure network server room
- Utilize relevant workplace safety and environmental standards during computer maintenance
- Effectively utilize a customer-oriented approach to resolve user problems
- Provide computer hardware and software support based upon a set of standard and systematic diagnostic principles

CPECPT 235 Cisco IT Essentials II–Server+

IT Essentials II

Intensive introduction to multiuser, multitasking network operating systems. Characteristics of the Linux, Windows 2000, NT, and XP network operating systems will be discussed. Students will explore a variety of topics including installation procedures, security issues, back up procedures, and remote access.

Course Objectives

Upon successful completion of this course, the student will receive a Certificate of Completion for IT Essentials II: Network Operating Systems. Acquired competencies include:

- Network Operating System basics
- Network Operating System components
- Network design and topology
- Media types and effectiveness
- Internet connection
- Network services including remote access and directory services
- NIC and IP address configuration

- NOS installation planning
- Windows 2000 installation and troubleshooting
- Linux installation and troubleshooting
- Network security plan development

CPECPT 238 Cisco PNIE

This course is designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission.

Students will develop skills in cable termination with both jacks and punchblocks, reading network design documentation, pulling and mounting cable, cable management, cable labeling, setting up telecommunications rooms, and patch panel installation and termination, as well as basic cable testing and troubleshooting, and basic cabling calculations. This hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively with others.

The Panduit Network Infrastructure Essentials course will provide a good start in a career path leading to becoming a network technician, technical support specialist, maintenance technician, testing engineer, information systems planner, and systems integrator. This course will also assist in getting students ready to enter an electrical engineering degree program.

Course Objectives

Upon completion of this course, students will:

- Understand the basics of cabling and related safety issues.
- Be able to discuss networking basics.
- Understand the concepts involved in signal transmission through various media, including cables, optical, and wireless.
- Be able to describe the different types of copper media.
- Be able to discuss fiber-optic media.
- Understand cabling standards.
- Be able to implement structured cabling.
- Be able to demonstrate proper use of the tools used in the cabling industry.
- Understand the cabling installation process.
- Be able to demonstrate skills required to complete the rough in phase of a cable installation.
- Be able to demonstrate skills required to complete the trim out phase of a cable installation.
- Be able to demonstrate skills required to complete the finish phase of a cable installation.
- Discuss cabling for special situations.
- Understand differences and similarities in standardization around the world.

CPECPT 107 Cisco Fundamentals of Network Security I

Introductory Network Security course focusing on the overall security processes with particular emphasis on hands-on skills in the following areas:

- Security policy design and management

- Security technologies, products, and solutions
- Secure router design, installation, configuration, and maintenance
- AAA implementation using routers
- Intrusion Detection (IDS) implementation using routers
- VPN implementation using routers

Course Objectives

Upon completion of this course, students will have an understanding of:

- Security terminology and acronyms
- Basic and advance security vulnerabilities
- Security policy design and management
- Security technologies, products, solutions and design
- Advanced Cisco IOS firewall installation, configuration, monitoring and maintenance
- AAA and IDS implementation using Cisco routers
- VPN implementation using Cisco routers
- Secure Network design

CPECPPT 101 Security+ Certification Training

This course teaches material that maps to all skill and knowledge objectives for the CompTIA Security+ certification exam (SY0-101). Skills covered include identifying access control and authentication methods, identifying services provided by encryption, and managing a Public Key Infrastructure (PKI). Upon completing this course, students will better understand common types of network-based attacks and how to respond to them.

Students will also learn how to harden operating systems, secure remote access, and ensure physical security. In addition to teaching firewall and intrusion-detection technologies, this course teaches critical incident response and system forensics concepts. This course also addresses essential auditing and documentation practices that help measure significant gaps between security policy and actual practice. Finally, students will learn the essentials of a disaster recovery plan, how to ensure business continuity, and how to create and manage a security policy. Throughout this course, students will review case studies to help ensure that best practices are employed throughout a network using the latest technologies, including wireless implementations.

Required Text: Security+ Certification Published by: Computer-
PREP, Inc. PROVIDED

Certifications: To earn the Security+ certification, students must pass the Security+ exam

CPECPPT 151 Information Systems Risk Analysis

The Operationally Critical Threat, Asset, and Vulnerability EvaluationSM (OCTAVE) Training Workshop is a three-day workshop. It is designed for interdisciplinary analysis teams that will lead and perform information security risk evaluations for large organizations.

OCTAVE is a self-directed risk evaluation that provides an organization with control over security risks; balances critical information assets, business needs, threats, and vulnerabilities; and benchmarks the organization against known or accepted best practices for security. This workshop covers the OCTAVE approach, OCTAVE

Method, and OCTAVE-S; preparation for implementing the methods; and guidelines for tailoring the methods.

The OCTAVE Training Workshop will help:

- manage and control enterprise-wide information security risk evaluations
- develop appropriate protection strategies by considering policy, management, administrative, technological, and other organizational issues to form a comprehensive view of the security state of your organization
- perform information security assessments and act as a focal point for security improvement efforts
- improve effectiveness at communicating business and security needs—internally and externally

Course Objectives

The three-day OCTAVE Training Workshop will help attendees:

- understand the purpose of the OCTAVE approach and the key characteristics of the methods
- be ready to use the OCTAVE implementation guides and do an evaluation
- understand how to get started and when to tailor the process and artifacts to meet their unique organizational needs

Course Topics:

- introduction to the OCTAVE approach, the OCTAVE Method, and OCTAVE-S
- preparation for OCTAVE
- review of OCTAVE processes
- identify critical assets and the threats to those assets
- identify the vulnerabilities that expose those threats
- develop an appropriate protection strategy for the organization's mission and priorities
- tailor OCTAVE to meet an organization's needs

Prerequisites: Workshop attendees should represent business/mission and/or IT perspectives

BUSINESS/OFFICE ASSISTANT/ ADMINISTRATIVE ASSISTANT

CPEBUS 201 Certified Employee Benefits Specialist Course 1

The first two assignments of Course 1 set the stage for the study of employee benefits to be pursued in the remainder of Courses 1 and 2 by examining the employee benefit environment, the functional approach to benefit planning, and risk management and insurance techniques in employee benefits. Much of this introductory material encompasses retirement plans, covered in Courses 3 and 4 of the CEBS program, as well.

The coverage of health care benefits begins with a discussion of the environment of health care and health care plans, followed by health plan designs and cost-control techniques. An assignment is devoted to the managed care spectrum as well as one to the health care cost equation. Other assignments cover evaluating and selecting health and managed care plans, maintaining and improving employee health, medical benefits for retirees, and long-term care. Dental plans and specialized benefits—behavioral health, prescrip-

tion drugs, vision, and hearing care plans—also are covered as is the timely topic of consumer-driven health plans, including health reimbursement accounts and health savings accounts. The course concludes with quality health care purchasing and vendor management, as well as fiduciary liability and ethical responsibility.

CPEBUS 202 Certified Employee Benefits Specialist Course 2

Following coverage of the various forms of life insurance benefits provided through the employment relationship, Course 2 examines a wide variety of other welfare benefits including: dependent care and family leave benefits; work/life benefits—such as financial planning, adoption assistance, legal services, and education assistance; and vacation and other time-off benefits. Two assignments deal with the important topic of flexible benefit plans and flexible spending accounts, and the course then covers various functions associated with welfare plans such as administration, funding, communication and taxation. One assignment is devoted to insuring and managing employee disabilities, and another to the timely topic of benefits technology and information management. The course concludes with assignments on workers' compensation and multiemployer plans.

CPEBUS 203 Certified Employee Benefits Specialist Course 3

This course is composed of two sections. The first section reviews the historical development of retirement plans, analyzes various sponsor objectives served by the creation of qualified retirement plans, and then provides a detailed analysis of both the tax and nontax qualification requirements. This course is also designed to give candidates an understanding of the types of individual account retirement plans available. Subjects discussed include profit-sharing plans, thrift and savings plans, Section 401(k) cash or deferred arrangements, employee stock ownership and stock bonus plans, individual retirement accounts, simplified employee pensions, SIMPLE plans, tax-deferred annuities, and executive retirement arrangements. Along with examining the various types of individual account plans, the course examines issues common to all such retirement planning vehicles, such as participant-directed investing, investment education, and distribution planning.

CPEBUS 204 Certified Employee Benefits Specialist Course 4

Course 4 is designed to teach the contemporary fundamentals of pension plans with particular emphasis on the defined benefit approach to providing retirement income. Retirement plans stressing the individual account or defined contribution approach toward providing postemployment income are covered in Course 3—Retirement Plans: Basic Features and Defined Contribution Approaches. Major subject areas covered in this course include plan design, actuarial aspects (costs and funding), investments of plan assets, and plan termination insurance.

Course 4 also examines such complex retirement issues as the creation of hybrid plans, offering early retirement incentives and structuring retirement plans to meet the special needs of executives. Hybrid plan designs combine features from both defined contribution and defined benefit plan types. Structuring incentive programs to induce retirement or to meet the special needs of executives involves specially tailoring elements of the retirement plan to meet employer human resource objectives.

Unless a candidate has an understanding of the basic qualification requirements for retirement plans, it is suggested that a candidate take Course 3—Retirement Plans: Basic Features and Defined Contribution Approaches prior to this course.

CPEBUS 207 Certified Employee Benefits Specialist Course 7

The investment of plan assets is a major function of employee benefit plan management. Every person working with employee benefit plans should have an understanding of investment policies, security markets, asset selection, portfolio theory and evaluation of financial performance. These topics have an impact not just on pension benefits but on the overall management of employee benefit assets (e.g., self-funded medical plans, VEBA accounts, etc.); consequently, these relationships should be understood by professionals in the field.

The course introduces asset management in the context of setting investment objectives for pension plan assets. The course then provides the necessary background on financial markets, how they are organized and how they operate. The concepts of risk versus return and efficient markets and the impact of modern portfolio theory are presented, followed by a detailed discussion on bonds, stocks, and derivatives. The discussion is interwoven with the various approaches, some controversial, used by investors in analyzing and evaluating these instruments and the overall performance of specific financial markets. The course also covers mutual funds, managed accounts, and guaranteed investment contracts (GICs), which play a unique role in the administration of pension plans.

CPEBUS 208 Certified Employee Benefits Specialist Course 8

Today's competitive global world is dependent on highly skilled and technologically adept workers. Employee benefits continue to be an integral part of the human resource and compensation management functions of an organization. The first part of Course 8 provides an overview of human resource management, including a discussion of internal and external factors affecting supervision. The legal and managerial requirements that human resource and compensation decisions be made in a nondiscriminatory manner are examined, the processes for carrying out effective recruitment and retention are presented, and issues related to creating effective training and development programs and dependable performance assessment systems are emphasized.

The course continues with assignments covering such topics as incentive programs, total compensation approaches and strategies for their implementation, and employee rights and the applications of such right in disciplinary, discharge, and termination situations. One assignment is devoted to labor relations, a critical function in many human resource departments. The collective bargaining process, the motivations for employees to organize, the legislative and administrative roles of the government in this process, and the impact of unionization on employers are covered in this assignment.

The course concludes with a discussion of specific practices and policies of human resource management that are needed to support high-performance work systems.

CPEBUS 211 Certified Employee Benefits Specialist Comp 1

This course provides a framework for understanding various types of compensation approaches. The course begins by presenting a pay model outlining strategic compensation objectives, policies that form the foundation of a compensation system, and alternate techniques that can be used in paying employees. The course distinguishes between job-based and person-based pay structures and the ongoing management functions that maintain internal alignment, enhance organizational competitiveness, and create employee incentives within these various types of pay systems. Methods for decision-making regarding pay level, pay mix, and pay structures are explored. Various pay-for-performance plans are explained, along with research evidence concerning their effectiveness in motivating employees and achieving business objectives. The course also examines the compensation of special groups, external market forces that impact compensation, the collective bargaining process, and the role of government and legal compliance issues in determining compensation practices.

CPEBUS 212 Certified Employee Benefits Specialist Comp 2

This course presents an overview of executive compensation issues and practices. The course begins with an explanation of various organizational approaches in determining which employees comprise the executive group. The course proceeds to describe the various components of executive compensation including direct pay, employee benefits, perquisites, short-term incentives, and long-term incentives. Design considerations in using these alternate forms of pay and the business objectives they seek to achieve are discussed. The crucial design element of balancing current versus deferred incentives is addressed along with performance measurements and standards used in determining compensation awards. Tax and financial considerations are examined and put into context when applied to certain pay techniques such as the use of nonqualified plans and stock option grants. The role of the board of directors in establishing and monitoring executive compensation and the increased public scrutiny and accountability for excessive pay awards are discussed.

CPEBUS 216 Certified Employee Benefits Specialist PFP 1

This course can be applied toward the GBA and RPA designations; i.e., you need only to complete seven courses to earn both the GBA and RPA. It can be used as a substitute for Course 10 for the ten-course CEBS curriculum, or it can also be used as an elective course for the new eight-course curriculum.

This course introduces the concepts and principles of personal financial planning. The initial assignment describes the steps in the personal financial planning process and the importance of formulating quantifiable client objectives. It also describes sources of information and tools used by the planner. Other assignments provide an overview of a distinct planning area in the financial planning process: insurance, investments, retirement planning, income taxation and estate planning. Subsequent assignments concentrate on life and health programs, property and liability converges, long-term care plans, equity analysis, investment strategy, retirement investment products and planning strategies. This course also describes relevant ethical issues and principles of professionalism required of the financial planning practitioner.

CPEBUS 217 Certified Employee Benefits Specialist PFP 2

This course may be used as an elective for the new eight-course curriculum.

This course, which is complementary to Personal Financial Planning 1, concentrates on the two subject areas of income taxation and estate planning. These concepts are applied to special situations, and techniques are described for minimizing taxes and achieving client objects. Income tax saving techniques are presented that are relevant to the individual taxpayer. Planning for retirement plan distributions also is explored. The transfer tax system is described covering both estate and gift taxes. The probate process, strategies for gifting and the marital deduction also are covered. Further management of property and its disposition is described with use of such relevant tools as revocable living trusts, wills, and will substitutes. This course also reviews various business structures and the special issues associated with creation, retention or disposition of a business interest in a family's financial planning.

HRM100 PHR/SPHR Certification Exam Preparation

Prepare for the PHR or SPHR exam and gain a comprehensive review of the entire body of HR knowledge. Using the SHRM Learning System, this course helps you highlight areas you may need to study further for the PHR/SPHR exam.

Offered in February and September of each year.
For information, please contact Lisa Kesig at 287-5613.

Engineering and Safety

Engineering

CPEE 101 - Building Systems Overview (BOC 101)

Provides an overview of preventive maintenance, energy efficiency principles, and fundamentals of building systems, equipment, and operations. Reviews heating, cooling, ventilation and control systems, water, lighting, and indoor air quality. Covers system interaction and relationship to overall building performance. Provides foundation for Level I certification courses. One day. Project: Facility and Equipment Floor Plan.
Cost: \$950 for entire 7-course certification program
CEUs: 0.7

CPEE 102 Energy Conservation Techniques (BOC 102)

Helps operators gain a better understanding of how energy is used in commercial buildings and how to identify and prioritize conservation opportunities. Includes basic principles of energy accounting, evaluation of fuel options, operation and maintenance strategies to improve efficiency, and energy management planning techniques. One day. Project: Energy Use Profile for Facility.
Cost: \$950 for entire 7-course certification program
CEUs: 0.7

CPEE 103 HVAC Systems and Controls (BOC 103)

Focuses on operation and maintenance of equipment and components typically found in commercial buildings, including central heating, cooling, air and ventilating systems in buildings. Provides introduction to automatic control systems and equipment, particu-

larly for central air systems. Emphasis placed on group problem solving and exercises with respect to preventive maintenance. Two days. Project: Heating System Operational Review.

Cost: \$950 for entire certification program

CEUs: 0.7

CPEE 104 Efficient Lighting Fundamentals (BOC 104)

Covers lighting fundamentals and types of lighting for economical and energy efficient lighting systems. Participants learn principles of efficient lighting, including evaluation of lighting levels, quality, and maintenance. Other topics include lighting fixture and control technologies, common upgrades, retrofit and redesign options, and management strategies as they apply to space use and function. One day. Project: Lighting Survey for Facility.

Cost: \$950 for entire certification program

CEUs: 0.7

CPEE 105 Maintenance and Related Codes (BOC 105)

Provides an overview of health, safety, energy, and environmental codes that impact facility operation. Stresses how to comply with the requirements of the most important health and safety codes and how to use the energy and maintenance-related codes to improve energy efficiency. One day.

Cost: \$950 for entire certification program

CEUs: 0.7

CPEE 106 Indoor Air Quality (BOC 106)

Introduces the basic causes of indoor air quality problems and begins to develop a method of diagnosis and solution. Students will gain an understanding of the dynamic components of indoor air quality in relation to source control, occupant sensitivity, and ventilation. Emphasis will be placed on communications with building occupants for reliable investigations without aggravating existing issues.

Cost: \$950 for entire certification program

CEUs: 0.7

CPEE 107 Facility Electrical Systems (BOC 107)

Develops an understanding of how electricity is distributed in a facility and common electrical distribution problems. This course will emphasize the fundamentals of electricity and its application to the workplace. Project: Electrical Distribution Sketch for Facility.

Cost: \$950 for entire certification program

CEUs: 0.7

Safety

CPESAF 114 727 Aircraft Assault Hostage Rescue

This course trains certified SWAT/Tactical operations in aircraft familiarization, tubular assault, hostage rescue, and negotiation methods involved in regaining control of commandeered aircraft. Required: Supply department proof that assigns you to the tactical team.

CPESAF 118 Hazardous Material Technician Refresher

The 8-hour Emergency Response Refresher Program reviews topics covered during the 40-hour Hazardous Material Technician level training. Training will include tasks used during chemical

incidents, including hazard identification, incident management, and spill control. (No charge; PUCO grant)

CPESAF 117 Hazardous Material Technician

The course provides participants an opportunity to learn background and techniques for protecting the health and safety of personnel, the environment, and property when responding to the accidental release of hazardous materials. Recognition and control of hazards at the scene are presented through illustrated lectures and small group activities. (No charge; PUCO grant)

CPESAF 122 Hazardous Material and WMD Operations

This 16-hour course has been approved by Ohio Homeland Security Task Force and the Federal Office of Domestic Preparedness. The course is designed to build upon the training and knowledge obtained from participating in the HM and WMD Awareness course and is designed for students requiring both Hazardous Materials and Weapons of Mass Destruction operational training.

CPESAF 121 Hazardous Material and WMD Awareness

This 8-hour course was developed by the State of Ohio Homeland Security Task Force, Sub-Committee for Training and approved by the Office of Domestic Preparedness. This course is designed to meet NFPA, OSHA, EPA, and ODP standards and guidelines, and the needs of multiple disciplines such as Fire, Law Enforcement, EMS, Healthcare Providers, and Public Works, that may be involved with incidents involving hazardous materials or weapons of mass destruction.

CPESAF 123 K9 Aircraft Explosive Detection Training

This course is specifically designed for Law Enforcement K9 Teams who may encounter, or are dedicated to, passenger and aircraft safety through protective explosive detection sweeps. Course provides REALISTIC TRAINING in a REALISTIC ENVIRONMENT. Officer and K9 partner will have detection exercises on the following aircraft: helicopter, small engine planes (Cessna), small jet planes (Lear) and large commercial jet planes (727). Some specific areas of instruction include: compartment locations, aircraft seams, K9 safety, jet blast zones, K9 search patterns, maintenance training concerns, and many more.

CPEE 200 10-Hour OSHA General Industry Safety Outreach Training

CPEE 201 30-Hour OSHA General Industry Safety Outreach Training

CPEE 202 General Industry Continuity of Operations (COOP) Awareness Level Training

CPEE 203 Mold Mitigation

CPEE 210 OSHA Hazardous Communication Standard (HCS or HAZCOM) B 29 CFR 1910.1200

CPEE 211 24-Hour Hazardous Materials Technician B 29 CFR 1910.120 (q)(6)(iii)

CPEE 212 8-Hour First Responder: Awareness Level B 29 CFR 1910.120 (q)(6)(i)

CPEE 213 8-Hour First Responder: Operations Level B 29 CFR 1910.120 (q)(6)(ii)

CPEE 220 40-Hour HAZWOPER for Site Workers B 29 CFR 1910.120 (e)(3)

CPEE 221 24-Hour HAZWOPER for RCRA TSDF Workers B 29 CFR 1910.120 (p)

- CPEE 222 8-Hour HAZWOPER Supervisor B 29 CFR 1910.120 (e)(4)**
- CPEE 250 Weapons of Mass Destruction - Awareness Level**
- CPEE 223 8-Hour HAZWOPER Refresher B 29 CFR 1910.120 (e)(8)**
- CPEE 224 8-Hour Incident Commander B 29 CFR 1910.120 (q)(6)(v)**

TWBUS 270 Home Inspection Course

Covers everything needed to become self-employed as a home inspector. Students use their accumulated skills, experience and knowledge to reinvent themselves as home inspectors. Learn what it takes to start a home inspection business by networking with other students, performing actual home inspections, and submitting inspection reports.

Online Courses

Columbus State's Global Campus offers a series of noncredit courses online for convenient continuing education, anytime, anywhere. Many of the courses are Microsoft-approved study guides, which can lead to Microsoft Certification. Visit the College's Web site at www.csc.edu for a complete course listing. The courses are offered in cooperation with DPEC, a Columbus computer training company.

CPEC 112 Mind Leaders Online Professional Series

User-paced professional development online courses and certificates.

CPEC 113 Mind Leaders Online Technical Series

Technical, self-paced, online courses and certificates.

For additional online courses, contact the Columbus State ACT/SkillsMax Center for Community Education and Workforce Development.

Transitional Workforce

Department

**Nancy Case, Director
(614) 287-5397**

The Transitional Workforce Department provides courses for a variety of students who want to gain the skills needed to enter, re-enter, or advance in the workforce. These include:

- Individuals not yet eligible or ready for credit classes.
- Those who want to pursue initial career and educational goals via noncredit courses.

OTAP (Orientation to Trade and Apprenticeship Programs)

**Carol Higgins, Program Coordinator
(614) 287-5921**

OTAP - Orientation to Trade and Apprenticeship Programs

This intense, 8-week, job training program teaches students the skills required to gain employment in the skilled trades and acceptance in apprenticeships or other career training programs. Students will have the opportunity to acquire skills in mechanical principles, applied technology, blueprint reading, basic electricity, fluid dynamics, thermodynamics, carpentry, hand power tools, OSHA ten-hour certification, and applied math. Students will gain knowledge to take entry-level exams for employment and training in trades-related fields.

For further information or to apply, call Central Registration at 287-5858, 287-5206 or 287-5905. This program is funded by COWIC and the Nationwide Corporation.

OTAP for Youth

This creative, after-school training program for Franklin County youth 16 to 18 years of age teaches students the skills needed to become employed or accepted into the trades upon graduation from high school. This program provides the same hands-on training as the adult OTAP program but in a modified format. The program runs eight weeks, two days per week, from 4:30 - 7:00 p.m.

A hot meal is provided, bus passes are available to ensure transportation, and incentives are given for attendance and completion. This program is funded by Franklin County Job and Family Services, Ingram White Castle Corporation, and The Columbus Foundation.

For further information or to apply, call Central Registration at 287-5858, 287-5938 or 287-5905.

OTAP Plus* is offered winter and spring, 2008, and will add 8 credit hours of training to the OTAP course:

- APPL 100 - The Construction Industry (2 hrs. lecture), 2 credit hours
- APPL 109 - Basic Skills for the Construction Trades, (2 hrs. lecture/2 hrs lab) 3 credit hours
- APPL 119 - Employability Skills for the Construction Trades (3 hrs. lecture), 3 credit hours

*This course currently available for TANF-eligible students only. For further information or to apply, call Central Registration at 287-5858, 287-5206 or 287-5905.

Academic Enrichment Program

Classes in the Academic Enrichment Program are designed for students who want to improve their English language and/or mathematical skills in order to increase career and/or educational opportunities.

The GED level classes include preparation for the General Educational Development test (GED) in order to earn an Ohio High School Equivalent Diploma and conclude with the administration of the Official GED Practice Test.

Classroom instruction is supported by extensive computer software covering basic-to-advanced lessons in reading fiction and non-fiction, essay structure, English grammar, and all areas of math. Extended computer lab hours offer opportunities for the student to receive individual assistance from the teaching staff.

Classes offered include:

TWBSC 101	Language Arts 1 (writing and reading)
TWBSC 201	Language Arts 2
TWBSC 301	GED Language Arts
TWBSC 102	Fundamental Math 1
TWBSC 202	Fundamental Math 2
TWBSC 302	GED MaSS (Math, Science and Social Studies)
TWBSC 401	Independent, Computer-assisted Learning

PLATO courseware is available in the classroom lab and offers more than 2,000 hours of basic-to-advanced level instruction in reading, writing, math, science, and life and work skills.

Language Institute

Tara L. Narcross, Ph.D., Coordinator
(614) 287-5448

Central Ohio's growing immigrant population and its increasing international connections have brought new attention to the importance of language instruction. In response to the growing need for focused language programming, The Language Institute provides specialized and occupational language courses as well as Basic English as a Second Language for individuals, companies, and organizations. It offers courses through open enrollment and by contract. Courses in language and cultural topics can be customized to meet client needs for a particular industry or cultural focus. Further course information can be found under the Continuing Professional Education Department section.

Basic English Program

Basic English 1 LILNG-100

In Basic English 1, students will be introduced to English pronunciation, the alphabet, numbers and basic literacy (reading and writing), as well as American culture as it relates to life skills.

Basic English 2 LILNG-200

Using present and past tenses, students will expand their abilities and knowledge in written and spoken vocabulary, questions and answers, and descriptions. The course also includes a secondary emphasis on life skills, culture, and reading comprehension.

Basic English 3 LILNG-300

Basic English 3 is designed to improve vocabulary skills as well as reading comprehension and writing ability. Students will build on previous knowledge and pave the way for further learning.

Basic English 4 LILNG-400

In Basic English 4, students will work to improve vocabulary, writing skills, grammar competency, and reading comprehension.

Basic English 5 LILNG-450

This course is designed to further improve the reading, writing, grammar and vocabulary skills of students seeking to improve their ability in English. Mastery of Basic English 4 and 5 is especially important for those students who plan to continue toward credit coursework through the College, the Academic Enrichment Program, and/or preparation toward the GED.

Intensive Basic English LILNG-500

The Intensive Basic English course presents the curriculum of Basic English 2 and Basic English 3 in a single intensive course, putting the student on the fast track to knowledge of the language.

Optional Basic English Courses

Basic Communication 1 LIBSC-100

This course focuses on oral communication for students. It can be taken alone or with other Basic English courses.

Citizenship Preparation LILNG-600

In this course, students can improve their English, learn about U.S. customs, history, and culture, and prepare to take the U.S. Citizenship Exam.

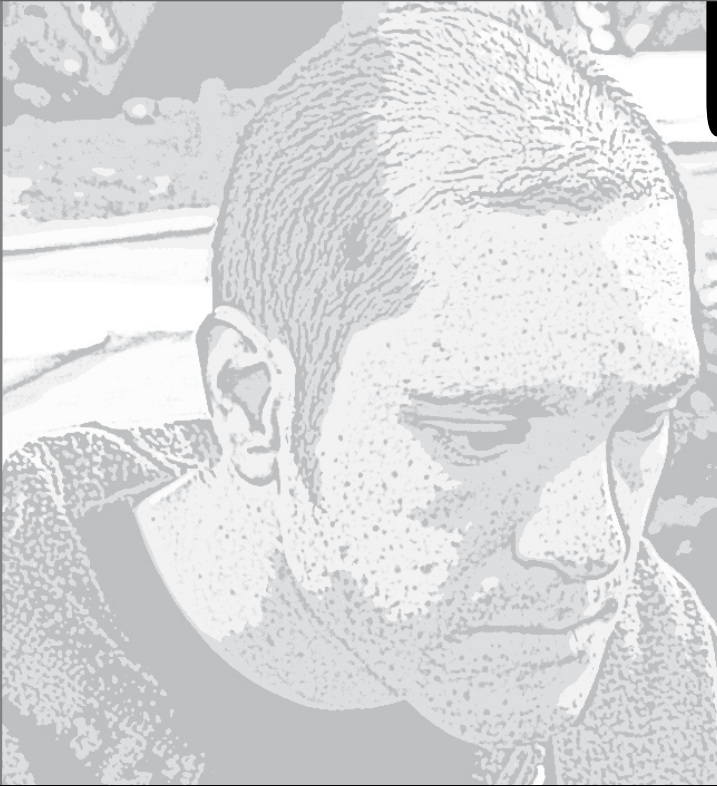
Introduction to Computers for ESL Speakers LICPT-100

In this course, students who are unfamiliar with computers can learn the basics of using a computer, including using a word processor, saving and printing documents, entering data on a spreadsheet, using e-mail, and finding information on the Internet.

DISTANCE LEARNING/

Global Campus

Pages 61-70



Distance Learning/Global Campus

Distance Learning at Columbus State Community College

Columbus State's Distance Learning Global Campus is a unique alternative to traditional on-campus learning. Distance Learning allows students from around the city or around the globe to learn, using the latest interactive Web and video technologies, without the limits of time and place. Global Campus is the term used at Columbus State to describe the College's distance learning website, courses, and programs.

At the Global Campus Web site <http://global.csc.edu>, students can find information on getting started with distance learning, current courses and programs being offered, free program downloads, free online training, and much more. Many students save the Global Campus website as a favorite.

Go the Distance and Get the Degree

The Global Campus Web site can assist students in finding individual online courses offered at Columbus State as well as with information on the following Associate Degrees and certificates being offered through Distance Learning instruction:

Distance Learning Degree Programs:

Associate of the Arts
Associate of Applied Science in Business Management
Associate of Applied Science in Geographic Information Systems (GIS)
Associate of Applied Science in Health Information Management
Associate of Applied Science in Marketing
Associate of Applied Science in Medical Laboratory Technology
Associate of Applied Science in Nursing
Associate of Applied Science in Sport and Exercise Studies (Sport Management Major)
Associate of Applied Science in Supply Chain Management

Distance Learning Certificates:

Digital Design
Direct Marketing
Geographic Information Systems (GIS)
Global Trade (Supply Chain Specialty)
Healthcare Management
Histology
Medical Coding
Pre-MBA Certificate (See Business & Marketing)
Supply Chain Purchasing
Supply Chain Management
Sustainable Building
3D Visualization

Please contact individual departments for details on your program of interest. Some programs may require some face-to-face learning experience. Look for new certificates and majors in the near future.

Types of Distance Learning Courses

Web-Based

Web-based courses use a variety of new Web technologies and software to provide a stimulating and interactive learning experience. An Internet-ready computer with a minimum of Internet Explorer 6.0 is required for students to log onto courses daily. Communication and course materials or assignments, as well as interaction with classmates, all occur within the course management system called Blackboard. When proctored testing is required, testing can be completed in the vicinity of the student.

Video-Based

Video-based courses are televised on the educational access channel or can be viewed on rented tapes from the library. Students can access broadcasting schedules as well as course information on their Blackboard course site or at <http://global.csc.edu>. Telecourses may require students to mail in assignments and/or meet throughout the quarter. When proctored testing is required, testing can be completed in the vicinity of the student.

Videoconferencing

Videoconferencing courses are offered using state-of-the-art videoconferencing equipment. The instructor is located at one site, and the course is broadcast to additional classrooms. This technology is highly interactive so that students have the opportunity to ask questions of the instructor and classmates at any site.

Blended

A blended course is comprised of multiple distance learning modalities, such as Web and video-based content, to offer an exciting way to learn. When proctored testing is required, testing can be completed in the vicinity of the student.

Hybrid

A hybrid course is one in which all the instructional and laboratory/clinical sessions are completed in a combination of traditional classes and at a distance. Students attend regularly scheduled sessions on campus. Because those on-campus meeting dates may be limited, please consult the academic department for specific information.

Getting Started in Distance Learning:

<http://global.csc.edu>

- Check out the latest opportunities, programs, and courses.
- Go through "Distance Learning Getting Started" to learn what skills are needed to be a successful Distance Learner.

Ohio Learning Network

The Ohio Learning Network is a collaboration of Ohio colleges and universities using technology and innovation to enhance distance-learning opportunities statewide. OLN offers access to a variety of distance education opportunities as outlined in the OhioLEARNS catalog, which can be found online at

Baccalaureate Degree Completion Programs via Distance Learning

These programs allow students who have completed their associate degree at Columbus State, to complete related bachelor's and master's degrees via distance learning from the following universities:

University of Cincinnati

Bachelor's in Liberal Arts and Social Sciences-Addiction Studies
Bachelor of Science in Clinical Laboratory Science
Bachelor of Science in Health Information Management
Bachelor of Science in Early Childhood Education
Bachelor of Science in Fire Science Technology

Franklin University

Bachelor of Science in Business Administration
Bachelor of Science in Technical Administration
Bachelor of Science in Computer Science
Bachelor of Science in Management of Information Systems
Bachelor of Science in Health Services Administration
Bachelor of Science in Marketing & Communication

Miami University

Bachelor's in Applied Science/Major Electro-Mechanical Engineering

Ohio University

Bachelor of Specialized Studies
Lifelong Learning Correspondence Course

University of Akron

Master of Applied Politics

University of Toledo

Bachelor of Science in Electronic Engineering and Computer Science
Bachelor of Arts program in Liberal Studies
Bachelor of Science in Health Informatics and Information Management

Devry University

Bachelor of Science in Business Administration
Bachelor of Science in Computer Information Systems
Bachelor of Science in Health Information Management
Bachelor's in Game & Simulation Programming
Bachelor's in Network and Communication Management
Bachelor's in Technical Management

Mount Vernon Nazarene College

Bachelor of Science in Business Administration

Bowling Green State University

Bachelor of Science in Advanced Technological Education
Bachelor of Liberal Studies
Bachelor of Science in Nursing

Ohio Dominican University

Bachelor of Arts in Criminal Justice

Florida International University

Bachelor of Business Administration
Bachelor of Science in Nursing

California University of Pennsylvania

Bachelor of Science in Sport Management Studies:
Wellness and Fitness Track

United States Sports Academy

Bachelor of Science in Sport Management
Bachelor of Science in Sport Coaching

Global Campus Courses

The following is a list of distance learning courses. Please consult the *online class schedule* for courses added throughout the year.

ACCT106	Introduction to Accounting I	ARCH243	3D Visualization - formZ II
ACCT107	Introduction to Accounting II	ARCH244	Rendering and Lighting - formZ
ACCT221	Financial Statement Analysis I	ARCH245	Computer Animation - formZ
ACCT222	Financial Statement Analysis II	ARCH246	3D Visualization - 3ds Max I
ACCT266	Public Administration/Fund Accounting	ARCH247	3D Visualization - 3ds Max II
ACCT269	Foundations of Accounting	ARCH252	Post Production
ANTH200	Introduction to Physical Anthropology	ARCH282	Sustainable Design Strategies
ANTH201	World Prehistory	ARCH283	Sustainable Architectural Design
ANTH202	Introduction to Culture Anthropology	ARCH299	Special Topics in Architecture
ANTH290	Capstone Experience in Anthropology	ASC 190	Freshman Seminar
ARCH112	Construction Drafting CAD I	AUTO061	Basic Automotive Systems & Theories of Operation
ARCH232	Building Construction Standards	BIO 100	Introduction to Biological Sciences
ARCH242	3D Visualization - formZ I		

Global Campus Courses - continued

BIO 101	Introduction to Anatomy & Physiology	CHEM100	Introduction to Chemistry
BIO 111	Introduction to Biology I	CHEM111	Elementary Chemistry I
BIO 112	Introduction to Biology II	CHEM112	Elementary Chemistry II
BIO 115	General Microbiology	CHEM113	General & Biological Chemistry
BIO 261	Human Anatomy	CHEM171	General Chemistry I
BIO 262	Human Physiology	CHEM172	General Chemistry II
BIO 170	Human Pathophysiology	CHEM173	General Chemistry III
BIO 174	Biological Sciences I	CIT 089	Introduction to FrontPage
BIO175	Biological Sciences II	CIT 092	Introduction to HTML
BIO201	General Zoology: Animal Diversity and Systematics	CIT 094	Web Learning Tools
BMGT101	Introduction to Business	CIT 096	Business Excel
BMGT102	Managing Interpersonal Skill I	CIT 097	Business Access
BMGT103	Interpersonal Skills II	CIT 098	Word Integration
BMGT104	Stress Management	CIT 100	Computer Literacy
BMGT105	Time Management	CIT 101	PC Applications I
BMGT106	Budgeting	CIT 102	Computer Literacy II
BMGT111	Management	CIT 139	Web Essentials
BMGT208	Organization Communication	CIT 141	Web Publishing
BMGT211	Organizational Behavior	CIT 145	HTML
BMGT216	Business Ethics	CIT 147	JAVA Script Fundamentals
BMGT218	Management Training for Supervisors	CIT 162	Introduction to Visual Basic
BMGT219	International Business	CIT 163	Visual Basic
BMGT220	Leadership Fundamentals	CIT 231	Expert Excel
BMGT231	Small Business Development	CIT 233	Expert Access
BMGT232	Small Business Operation	CIT 250	Network Communication Systems
BMGT253	The Art and Science of Conflict Resolution	CIT 253	TCP/IP
BMGT271	Management Decisions	CIT 263	Advanced Visual Basic
BMGT272	Case Studies in Business Seminar	CIT 266	Interactive COBOL
		CIT 268	Object-Oriented COBOL



Global Campus Courses - continued

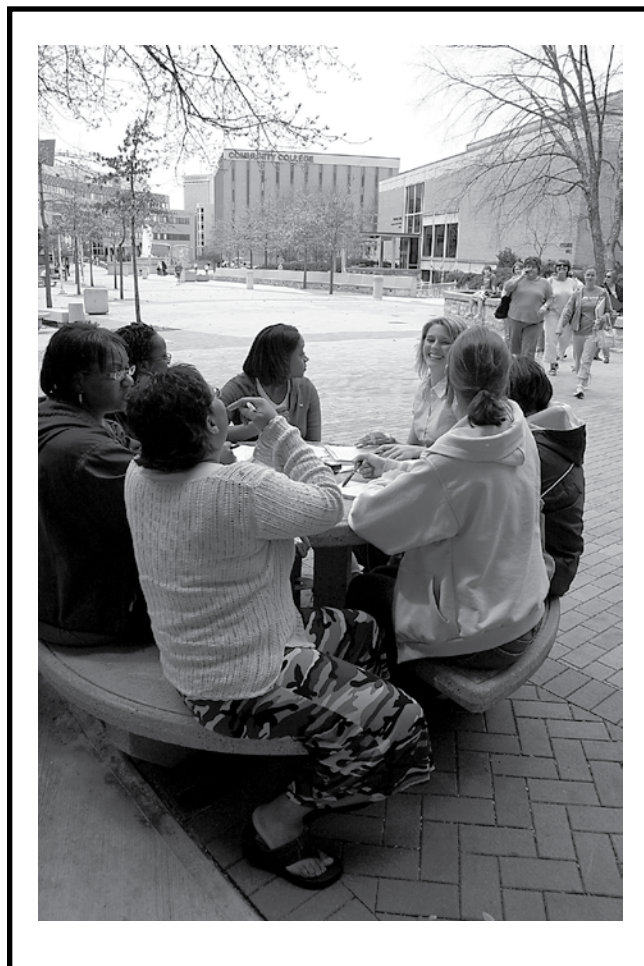
CIT 280	ACP Examination	ENGL298	Special Topics in English
CMGT105	Construction Contract Documents	ENGL299	Special Topics in English
CMGT282	Sustainable Building Documents, Drawing and Materials	ENVR101	Introduction to Environmental Science, Safety and Health
COMM105	Speech	ENVR158	Environmental Site Assessment
COMM110	Conference and Group Discussion	ENVR252	Health and Safety Training for Hazardous Waste Operations
COMM115	Oral Interpretation	ENVR256	Hazardous Materials Refresher Training
COMM220	Introduction to Mass Communication	ENVR282	Sustainable Building Strategies
DENT111	Anatomy	FMGT101	Personal Finance
DENT121	Complete Dentures I	FMGT201	Business Finance
DENT132	Occlusion	FOTO 112	Photoshop for Photographers I
DENT153	Fixed Partial Dentures I	FOTO 114	Digital Photography
DENT275	Ceramics I	GEOG200	World Regional Geography
DEV 006	Basic Grammar Skills	GEOG207	Introduction to Geographic Information Systems
DEV 007	Basic Punctuation Skills	GEOG280	Elements of Cartography
DEV 030	Basic Mathematics	GIS 100	Acquiring GIS Data
DEV 031	Pre-Algebra	GIS 105	Elements of Photogrammetry
DEV 044	Critical Reading and Thinking	GIS 130	Introduction to Spatial Analysis
DEV 050	Career/Life Planning	GIS 203	Remote Sensing of Environment
DHY 282	Biostatistics and Research for the Dental Hygienist	GIS 251	GIS Software I - ArcGIS
ECD 107	Curriculum Planning	GIS 253	GIS Software II
ECON100	Introduction to Economics	GIS 275	Planning and Implementing GIS
ECON200	Principles of Microeconomics	GIS 277	Introduction to ArcIMS
ECON240	Principles Macroeconomics	GIS 278	VBA Programming for GIS
ECON280	Intermediate Micro Economics	GIS 279	Introduction to GIS Databases
ENGL100	Language Development	GIS 280	Advanced GIS Applications
ENGL101	Beginning Composition	GIS 281	Introduction to ArcGIS Server
ENGL102	Essay & Research	GIS 283	GIS In Emergency Management
ENGL111	English Composition	GIS 290	Seminar for GIS
ENGL200	Business Communications	GIS 291	GIS Practicum
ENGL204	Technical Writing	GRPH110	Survey of Graphic Communications
ENGL207	Writing for the Web	GRPH112	Intro to Computer Graphics
ENGL210	Creative Writing	GRPH114	Digital Photography
ENGL220	Introduction to Literature	GRPH122	Electronic Publishing
ENGL225	Introduction to Fiction	GRPH125	Image Assembly
ENGL230	Introduction to Dramatic Literature	GRPH131	Design and Typography
ENGL235	Introduction to Poetry	GRPH241	Estimating
ENGL240	Introduction Science Fiction	GRPH243	Computer Graphic Illustration
ENGL245	Introduction to Film	GRPH251	Electronic Imaging
ENGL250	Writing About the American Experience	GRPH252	Digital Imaging II
ENGL251	American Identity	GRPH273	Design II
ENGL252	Images of Men and Women in Literature	GRPH282	Electronic Publishing II
ENGL253	Regional American Writing	GRPH291	Preparing a Professional Portfolio
ENGL260	Survey of Modern US Literature	GRPH294	Running a Photography Business
ENGL261	Survey of British Literature	GRPH299	Special Topics in Graphics
ENGL262	Survey of British Literature	HIMT111	Introduction to Health Information Management Tech
ENGL264	Introduction to Shakespeare	HIMT112	Internet Applications in Heath Care
ENGL265	European Literature in Translation	HIMT113	Managed Care Trends
ENGL270	African - American Writers	HIMT121	Advanced Medical Terminology
ENGL281	Writing Fiction	HIMT133	Legal Aspects of the Health Record
ENGL282	Writing Poetry	HIMT135	Health Data Management
ENGL284	Writing Creative Nonfiction		
ENGL285	Writing to Publish		

Global Campus Courses - continued

HIMT141	Pharmacology for HIMT	LEGL261	Business Law I
HIMT243	Comparative Health Settings in HIM	LEGL262	Business Law II
HIMT245	ICD-9-CM Coding	LEGL264	Legal Environment of Business
HIMT255	CPT-4 Coding	LOGI100	Principles of Supply Chain Management
HIMT256	Clinical Data Analysis	LOGI110	Transportation & Traffic Management
HIMT257	Introduction to Health Statistics	LOGI151	Purchasing Principles I
HIMT259	Quality and Resource Management	LOGI152	Purchasing Principles II
HIMT265	Medical Reimbursement	LOGI205	Freight Claims
HIMT267	Principles of Management	LOGI210	Warehouse Management
HIMT270	Certified Case Management	LOGI211	Inventory Management
HIMT274	Issues in Health Information Management	LOGI225	International Shipping
HIMT275	Intermediate Coding	LOGI226	Introduction to Export Administration Regulations
HOSP143	Hospitality and Travel Law	LOGI227	Electronic Import/Export Documentation
HOSP153	Nutrition	LOGI228	Importing
HOSP257	Computer Reservations Systems	LOGI229	International Transportation Regulatory Compliance
HOSP291	Hospitality Cooperative Work Experience I	LOGI241	Supply Chain Logistics Practicum
HOSP292	Hospitality Cooperative Work Experience II	LOGI242	Supply Chain Logistics Seminar I
HRM 121	Human Resource Management	LOGI246	Purchasing Negotiation
HRM 220	Labor Relations	LOGI250	Transportation of Hazardous Materials
HRM 224	Human Resource Information Systems	LOGI256	Advanced Purchasing Seminar
HRM 225	Alcohol and Drugs in the Workplace	MASS235	Massage Law & Business Principles for Massage Therapy
HUM 111	Civilization I	MASS271	Massage Anatomy & Physiology I
HUM 112	Civilization II	MASS272	Massage Anatomy & Physiology II
HUM 113	Civilization III	MASS273	Massage Anatomy & Physiology III
HUM 151	American Civilization to 1877	MASS274	Massage Anatomy & Physiology IV
HUM 152	American Civilization Since 1877	MAT 260	Ethical and Professional Principles in the Medical Office
HUM 222	Classical Mythology	MAT 296	Seminar
HUM 270	Comparative Religions	MATH101	Business Math
IMMT100	Digital Literacy	MATH102	Beginning Algebra I
IMMT101	The World of Multimedia	MATH103	Beginning Algebra II
IMMT111	The Digital Revolution	MATH104	Intermediate Algebra
IMMT121	Introduction to Multimedia	MATH116	Mathematics for the Liberal Arts
IMMT122	Digital Media Preparation	MATH135	Elementary Statistics
IMMT153	Formatting & Screenwriting for Digital Video and Audio	MATH148	College Algebra
IMMT213	Designing an E-Commerce Website	MECH244	Statistical Process Control
IMMT214	Web Database Development	MECH250	Materials Science
IMMT236	Designing in 3rd Dimension	MHCR114	Introduction to Chemical Dependency
IMMT250	Document Transfer Using Adobe Acrobat	MHCR117	Introduction to Documentation Skills
IMMT251	Multimedia Practicum	MHCR236	Foundations in Prevention
IMMT252	Seminar on Multimedia Production	MKTG101	Introduction to Retailing
IMMT280	Basic Flash	MKTG111	Marketing Principles
IMMT283	Dreamweaver	MKTG122	Business & the Internet
IMMT290	Photoshop and ImageReady	MKTG131	Market Research Principles
IMMT297	Special Topics in Interactive Multimedia	MKTG140	Advertising and Promotion
LAND110	Landscape Computer Applications	MKTG141	Integrated Marketing Communications
LAWE101	Introduction to Criminal Justice	MKGT142	Media Buying
LAWE115	Community and Personal Relationships	MKTG145	Services Marketing
LAWE253	Criminal Procedure	MKTG146	Nonprofit Marketing
LAWE273	Special Topics in Law Enforcement	MKTG150	Introduction to E-Commerce
LEGL101	Introduction to Legal Assisting	MKTG205	Quantitative Methods for Retailing
LEGL102	The Legal System		
LEGL103	Law Office Procedures and Management		
LEGL250	Intellectual Property		

Global Campus Courses - continued

MKGT213	Merchandise Buying and Management	NURS124	Nursing Skills II
MKTG221	Consumer Behavior	NURS130	Concepts of Pharmacology I
MKTG223	Sales Principles & Practices	NURS131	Concepts of Pharmacology II
MKGT224	Public Relations	NURS188	Neonatal Nursing
MKTG226	Customer Service Principles & Practices	NURS191	Basics of Gerontological Nursing
MKTG229	Organizational Marketing	NURS193	End of Life Care
MKTG236	Direct Marketing	NURS195	Nursing Concepts Enhancement I
MKTG237	Database Marketing	NURS196	Nursing Concepts Enhancement II
MKTG265	Understanding Interactive Users	NURS198	Info Tech in Health
MKTG266	Marketing Communications on the Web	NURS210	Nursing Concepts of Health Maintenance and Restoration
MKTG267	Electronic Payment Systems	NURS 211	Nursing Concepts of Health Maintenance and Restoration II
MKTG270	Global Marketing/International Business Practice Firm	NURS 212	Nursing Concepts of Health Maintenance and Restoration III
MKTG285	Ads & Promo on Web	NURS 213	Concepts of Nursing Management
MKTG286	Customer Service on the Web		
MKTG287	Public Relations on the Web		
MKTG288	Marketing Research on the Web		
MKTG289	Direct Marketing on the Web		
MKTG290	Government Marketing on the Web		
MKGT292	Nonprofit Marketing Using the Web		
MLT 100	Introduction to Health Care		
MLT 120	Role and Responsibility of the MLT		
MLT 130	Immunology		
MLT 141	Hematology I		
MLT 220	Immunohematology		
MLT 240	Hematology II		
MLT 242	Body Fluids		
MLT 244	Medical Laboratory Case Studies		
MLT 250	Clinical Microbiology		
MLT 260	Clinical Chemistry		
MULT101	Medical Terminology		
MULT150	Histologic Techniques		
MULT152	Tissue Identification		
MULT154	Chemistry of Stains I		
MULT156	Chemistry of Stains II		
MULT176	Fundamentals of Herbiology		
MULT270	Human Resource Management for Health Services		
MULT272	Health Care Resource Management		
MULT274	TQM/UM/Accreditation		
MULT276	Legal Aspects and Risk Management		
NSCI101	Natural Science I		
NSCI102	Natural Science II		
NSCI103	Natural Science III		
NURS100	Health Assessment in Nursing		
NURS109	Student Transition		
NURS110	Introduction to Nursing		
NURS111	Health Promotion of Women and Families		
NURS112	Introduction to Nursing Concepts of Health Maintenance and Restoration		
NURS113	Nursing Skills		
NURS120	Health Assessment in Nursing I		
NURS121	Health Assessment in Nursing II		
NURS123	Nursing Skills I		



Global Campus Courses - continued

OADM101	Business Grammar Usage	SES 222	Court Sports I
OADM113	Quickbooks	SES 223	Court Sports II
OADM114	Quickbooks II	SES 225	Athlete Intervention
OADM131	Keyboarding I	SES 230	Fitness Concepts for Special Population
OADM132	Keyboarding II	SES 231	Exercise Physiology
OADM133	Keyboarding III	SES 234	Sport Marketing
OADM139	Keyboarding Improvement	SES 235	Sport Law
OADM186	Introduction to Word	SES 237	Corporate Health
OADM187	Introduction to Excel	SES 238	Aging Fitness and Exercise
OADM188	Introduction to PowerPoint	SES 241	Kinesiology
OADM189	Introduction to Access	SES 280	History of Sport in the United States: 1840-Present
OADM191	Word I	SES 292	Practicum I
PHIL101	Introduction to Philosophy	SES 294	Practicum II
PHIL130	Ethics	SES 298	Special Topics in Sport
PHIL150	Introduction to Logic	SOC 101	Introduction to Sociology
PHYS100	Introduction to Physics	SOC 202	Social Problems
PHYS117	College Physics (Mechanics and Heat)	SOC 210	Sociology of Deviance
PHYS118	College Physics (Electricity, Magnetism and Light)	SOC 230	Marriage and Family Relations
PHYS177	General Physics I	SOC 280	American Race & Ethnic Relations
PHYS178	General Physics II	SPAN101	Elementary Spanish I
PHYS179	General Physics III	SPAN102	Elementary Spanish II
PNUR101	Foundations of Practical Nursing	SPAN103	Intermediate Spanish I
PNUR102	Introduction to Practical Nursing Concepts	SPAN104	Intermediate Spanish II
PNUR103	Practical Nursing Concepts Related to Health Promotion, Maintenance, and Restora- tion	SSCI100	Globalization: Social Science Perspective
PNUR104	Practical Nursing Concepts Related to Maternal and Child Health	SSCI101	Cultural Diversity
PNUR105	Concepts Related to Practical Nursing Practice	SSCI102	America in Transition
PNUR122	Pharmacology II for the Practical Nurse	SSCI103	Social Problems
PNUR190	Special Topics in Practical Nursing	SSCI104	World Economic Geography
POLS101	Introduction to American Government	SSCI290	Capstone Experience in Social Sciences
POLS165	Introduction to Politics	SURV299	Special Topics in Civil Engineering Technology
PSY 100	Introduction to Psychology	TCO 235	Instructional Design
PSY 200	Educational Psychology	TCO 236	Computer-Based Training
PSY 230	Abnormal Psychology	TCO 245	HTML-Based Online Documentation
PSY 240	Human Growth & Development Through Life Span	TCO 297	Special Topics in Technical Communication
PSY 251	Adolescent Psychology	TCO 299	Special Topics in Technical Communication
PSY 261	Introduction to Child Development	THEA100	Introduction to the Theater
QUAL240	Total Quality Management	VET 101	Animal Nutrition
RAD 203	Anatomy and Physiology	VET 122	Veterinary Parasitology
RAD 204	Mammographic Positioning	VET 135	Veterinary Hematology
RAD 205	Mammographic Physics and Quality Assessments	VET 254	Clinical Seminar
RAD 206	Mammography Special Procedures and Pathology	VET 266	Animal Health and Disease II
RAD 207	Clinical Experience in Mammography	VET 267	Veterinary Urinalysis and Clinical Chemistry
RAD 208	Mammographic Physics and Quality Assessment Laboratory	VET 269	Veterinary Microbiology
REAL240	Introduction to Entrepreneurship	VET 274	Clinical Seminar
SES 100	Personal Fitness		

Please refer to the course description section of this catalog to determine what type of distance learning courses are being offered by your program of study.

PROGRAMS OF STUDY

And

Course Descriptions

Pages 71-328



Programs of Study and Course Descriptions

General Education

Central to the mission of Columbus State Community College is the provision of General Education studies for all degree programs. General Education comprises the measurable knowledge and skills that serve as the foundation for success in society and in one's discipline, vocation, and life. Columbus State Community College's General Education Outcomes are an integral part of the curriculum and central to the mission of the College. The faculty at Columbus State Community College has determined that these outcomes include the following competencies:

1. Critical Thinking

Critical thinking involves recognizing, analyzing, and defining problems, drawing logical well-supported conclusions and testing them against relevant criteria and standards. Critical thinking also includes examining issues by identifying and challenging assumptions (including one's own), developing alternative solutions or strategies, and evaluating practical and ethical implications.

2. Effective Communication

Effective communication involves writing, speaking, or communicating using language appropriate to the audience, technology, and purpose. Effective communication also includes receiving information/listening actively with understanding, demonstrating college-level reading comprehension, and writing in Standard English.

3. Community and Civic Responsibility

Community and civic responsibility involves collaborating and interacting effectively with others and identifying individual and group roles. Community and civic responsibility also includes recognizing social responsibilities, ethics, and individual rights in a democratic society. Other elements include recognizing social diversity, including contributions, traditions, cultures, lifestyles, and/or values of others.

4. Quantitative Literacy

Quantitative literacy involves performing mathematical computations using appropriate methods to arrive at accurate results. Quantitative literacy also includes analyzing, interpreting, and explaining the results of computations, including graphs, charts, tables, or statistical data.

5. Scientific and Technological Effectiveness

Scientific and technological effectiveness involves differentiating between scientific and nonscientific methods of inquiry and using scientific knowledge in the analysis of civic and environmental issues. Scientific and technological effectiveness also includes integrating technology appropriate to one's vocation or discipline. Other elements include recognizing the impact of science and technology on society and how scientific and technological principles are built and used in the modern world.

6. Information Literacy

Information literacy involves defining the information needed to accomplish a specific purpose and accessing, analyzing, synthesizing, and incorporating selected information effectively. Information literacy also includes evaluating information critically and drawing from a variety of perspectives and sources. Other elements include the ethical and legal use of information.

Career and Technical Programs

Associate of Applied Science

Associate of Technical Studies

Certificate Programs

Technical degree programs are designed to prepare students for immediate employment upon graduation. Programs of Study can be completed within two years for students enrolled full-time. Baccalaureate Degree completion agreements have been made with Ashland University, Capital University, DeVry University, Franklin University, Ohio Dominican University, Otterbein College, Shawnee State University, the University of Akron, the University of Phoenix, and Wilberforce University that enable technology students to complete baccalaureate degrees in General Studies areas such as business management within two years of full-time study at those institutions. Technology Specific 2+2 Agreements for the Associate of Applied Science to the B.A./B.S. degrees have been developed with Bethel College, Ohio Christian College, DeVry University, Embry-Riddle Aeronautical University, Florida International University, Miami University of Ohio, Mount Carmel College of Nursing, Mount St. Joseph College, Ohio University, Sullivan University, The Ohio State University, Tiffin University, The United States Sports Academy, the University of Rio Grande, the University of Cincinnati, and the University of Toledo. Bachelor Degree completion information is available from the academic departments and Advising Services.

Within many of the technologies, short-term certificate programs are offered which qualified students can complete in less than two years.

Arts and Sciences/ Transfer Programs

Associate of Arts

Associate of Science

The Ohio Transfer Module

The Associate of Arts and Associate of Science degrees are specifically designed to allow for the transfer and application of all credits earned at Columbus State to the bachelor degree requirements of most colleges and universities. The Associate of Science Degree is

different from the Associate of Arts Degree primarily in the level of mathematics required. The Associate of Science Degree requires completion of Calculus and Analytical Geometry II, which are the foundation for further study in advanced physics, chemistry, mathematics, and engineering. Careers in the biological and health sciences may not require this level of mathematics.

Specific agreements have been made with colleges at The Ohio State University, Antioch College, Ashland University, Capital University, Central State University, Franklin University, Kent State University, Mount Carmel College of Nursing, Ohio Dominican University, Ohio University, Otterbein College, Shawnee State University, the University of Akron, the University of Cincinnati, the University of Toledo, and Wilberforce University which guarantee admission and the application of all courses taken in the Associate of Arts and Associate of Science degree programs at Columbus State to the bachelor degree requirements at those institutions. Guides for course selection to meet specific requirements at these schools are available in Advising Services or from the Dean of Arts and Sciences.

Completion of the Associate of Arts and Associate of Science degrees at Columbus State ensures completion of the Ohio Transfer Module. This guarantees the application of a minimum of 60 quarter hours to the General Education Requirements of all state supported institutions in Ohio. Those students who complete the AA or AS degree are to be given preferential consideration for admission to all Ohio public colleges.

In 2005, at the urging of the Ohio Legislature, all publicly supported state institutions in Ohio agreed to enhance transfer opportunities for Ohio residents by establishing Transfer Assurance Guides (TAGs) which guarantee the transfer and application of disciplinary courses to specific baccalaureate majors. Certified TAGs or University Parallel guides are available in Advising Services or from the Dean of Arts and Sciences.

Graduation Requirements: Catalog Rights

In order for a student to be considered a candidate for an associate degree, he/she must have completed all the requirements for that degree as described in the College Catalog in effect at the time the student enrolled in the program leading to that degree. If the requirements for the degree change while the student is enrolled in a degree program, the original requirements will apply to the student until he/she earns the degree or for a period of twelve quarters from the time the student initially enrolled in the program. If the student does not receive a degree within twelve consecutive quarters of initial enrollment, and there is a change in the degree requirements, the Provost for Learning Systems shall decide what requirements the student shall meet in order to be awarded a degree. These catalog rights are also applicable to the Ohio Transfer Module and Ohio Transfer Assurance Guides.

Graduation Requirements: Associate of Arts and Associate of Science Degrees

1. All students must satisfactorily complete at least 92 credit hours of approved courses, a minimum of 35 hours of which must be completed at Columbus State. Approved courses are designated below. Satisfactory completion requires a final grade of A, B, C, or D. Transfer credit may be awarded for courses in which a "C" or better has been earned at other accredited institutions, or a "D" or better from public Ohio institutions, if the course level equivalencies have been approved by the Dean of Arts and Sciences. Courses listed in the "Transfer Module" or "Transfer Assurance Guides" of an Ohio college, have been pre-approved for credit toward a Columbus State degree. Credits by examination, proficiency credit, nontraditional credit, and transfer credit do not apply toward meeting residency credit hour requirements.
2. All students must attain an overall grade point average of 2.0 or better for all credit courses at the 100 level or above taken at Columbus State. Grade point averages are calculated on the following scale: A=4, B=3, C=2, D=1, E=0. Number equivalencies are not assigned for grades other than these.
3. All students must complete the following General Education Requirements for the Associate of Arts or the Associate of Science degrees.
4. All students must file a "Petition to Graduate" during the quarter preceding their graduation quarter. Refer to page 30 of this Catalog for complete details.

ASC 190 Freshman Seminar – 2 hours or ASC 150 Individual Learning and Motivation –5 hours required for all new degree seeking students or students new to Columbus State with less than 15 applicable hours of transfer credit from their previous college. Students are to take this course in conjunction with ENGL 101 or ENGL 111.

Communication Skills-12 quarter hours minimum
College Composition - (5-6 hours required)

- ENGL 101 Beginning Composition (3 hours) **and**
- ENGL 102 Essay and Research (3 hours) **or**
- ENGL 111 English Composition (5 hours)

(Students who place into ENGL 111 may take ENGL 111 instead of ENGL 101 and ENGL 102.)

Composition and Literature (3-5 hours required)

Students who complete ENGL 111 must take a five-hour Composition and Literature course. Additional courses in this category may not be taken as elective hours.

- ENGL 220 Introduction to Literature (3 hours)
- ENGL 250 Writing About the Amer. Exp. (5 hours)
- ENGL 251 The American Identity (5 hours)
- ENGL 252 Images of Men & Women in Amer. (5 hours)
- ENGL 253 American Regional Writing (5 hours)

Oral Communication (3 hours required)

- COMM 105 Speech (3 hours)
- COMM 110 Conference and Group Discussion (3 hours)
- COMM 115 Oral Interpretation (3 hours)

Mathematical and Logical Analysis - Associate of Arts Degree requires 10 quarter hours, 5 must be in mathematics. The remaining 5 hours may be from mathematics, statistics, logic, or computer programming. The Associate of Science Degree requires completion of MATH 152.

Mathematics

- MATH 116 Mathematics for the Liberal Arts (5 hours) **or**
- MATH 148 College Algebra (5 hours) **or**
- MATH 130 Mathematical Analysis for Business (5 hours)
- MATH 150 Precalculus (5 hours)
- MATH 151 Calculus and Analytical Geometry I (5 hrs)
- MATH 152 Calculus and Analytical Geometry II (5 hrs)
- MATH 153 Calculus and Analytical Geometry III (5 hrs)
- MATH 254 Multivariable Calculus (5 hrs)
- MATH 255 Elementary Differential Equations I (5 hrs)
- MATH 268 Elementary Linear Algebra (5 hours)
- MATH 285 Ordinary and Partial Differential Equations (6 hrs)
- MATH 131 Business Calculus I (5 hours)
- MATH 132 Business Calculus II (5 hours)

Statistics

- MATH 135 Elementary Statistics (5 hours)
- MATH 233 Statistics for Business (5 hours)
- MATH 277 Probability and Statistics I (5 hours)
- MATH 278 Probability and Statistics II (5 hours)

Formal Logic

- PHIL 150 Introduction to Logic (5 hours)
- PHIL 250 Symbolic Logic (5 hours)

Computer Programming

- CIT 161 Programming 1 (5 hours)
- CIT 261 Programming 2 (5 hours)
- CIT 165 COBOL 1 (5 hours)
- CIT 265 COBOL 2 (5 hours)
- CIT 266 Interactive COBOL (5 hours)
- CIT 173 Database Programming (3 hours)
- CIT 273 Database Systems (3 hours)
- CIT 167 C++ Programming 1 (5 hours)
- CIT 267 C++ Programming 2 (5 hours)

Biological and Physical Sciences

Associate of Arts - 15-20 hours

Option 1: (15 hours) NSCI 101, NSCI 102, NSCI 103, and NSCI 110.

Option 2: 20 hours from the following approved lists. At least one course must be from the Biological Sciences and at least one course must be from the Physical Sciences.

Associate of Science - 25 hours

Option 1: NSCI 101, NSCI 102, NSCI 103, NSCI 110 and 10 additional hours of mathematics above the level of MATH 152 Calculus and Analytic Geometry II or 10 additional hours of laboratory science from the following approved lists.

Option 2: 25 hours of laboratory science from the following approved lists, including one approved 10-hour sequence. At least one course must be taken from the Biological Sciences and at least one course must be from the Physical Sciences.

Option 3: 15 hours of laboratory science from the approved lists **and 10 hours** of mathematics above the level of MATH 152 Calculus and Analytic Geometry II.

Approved 10-hour Sequences

Physical Sciences	Biological Sciences
CHEM 111& 112	BIO 111 & BIO 112
CHEM 171 & 172	BIO 111 & BIO 115
PHYS 117 & 118	BIO 111 & BIO 126

PHYS 177 & 178

BIO 111 & BIO 127
 BIO 111 & ANTH 200
 BIO 261 & BIO 262
 BIO 174 & BIO 175

Approved Individual Courses

Physical Sciences

- CHEM 110 (5hours)
- CHEM 113 (5 hours)
- CHEM 173 (5 hours)
- CHEM 251 (5 hours)
- CHEM 252 (5 hours)
- CHEM 253 (5 hours)
- CHEM 261 (5 hours)
- GEOL 101 (5 hours)
- GEOL 121 (5 hours)
- GEOL 122 (5 hours)
- PHYS 106 (5 hours)
- PHYS 119 (5 hours)
- PHYS 179 (5 hours)
- ASTR 161 (5 hours)

Biological Sciences

- ANTH 200 (5 hours)*
- ANTH 240 (5 hours)*
- BIO 104 &105 (6 hours)
- BIO 215 (5 hours)
- BIO 125 (5 hours)
- BIO 126 (5 hours)
- BIO 127 (5 hours)
- BIO 261 (5 hours)
- BIO 262 (5 hours)
- BIO 263(5 hours)
- BIO 201 (5 hours)
- BIO 205 & 206 (6 hours)

*Note: Students may not use ANTH 200 and ANTH 240 to satisfy both Biological Science and Social Science Requirements.

Social and Behavioral Sciences – 15-20 hours

Option I: 15 quarter hours - choose three from:

- SSCI 100 Globalization: The Social Science Perspective (5 hours)
- SSCI 101 Cultural Diversity (5 hours)
- SSCI 102 Popular Culture (5 hours)
- SSCI 104 World Economic Geography (5 hours)
- SSCI 105 Law and Society (5 hours)

Option II: 20 quarter hours from at least two areas:

Integrated/Interdisciplinary

- SSCI 100 Globalization: The Social Science Perspective
- SSCI 101 Cultural Diversity (5 hours)
- SSCI 102 American Popular Culture (5 hours)
- SSCI 104 World Economic Geography (5 hours)
- SSCI 105 Law and Society (5 hours)

Economic/Geography

- ECON 100 Introduction to Economics (5 hours)
- ECON 200 Principles of Microeconomics (5 hours)
- ECON 240 Principles of Macroeconomics (5 hours)
- ECON280 Intermediate Microeconomics (5 hours)
- GEOG 200 World Regional Geography (5 hours)
- GEOG 207 Intro to Geographic Information Systems (5 hours)
- GEOG 280 Elements of Cartography (5 hours)

Political Science

- POLS 101 Introduction to American Government (5 hours)
- POLS 165 Introduction to Politics (5 hours)

Psychology

- PSY 100 Introduction to Psychology (5 hours)
- PSY 200 Educational Psychology (5 hours)
- PSY 230 Abnormal Psychology (5 hours)
- PSY 235 Psychology of Adjustment (3 hours)
- PSY 240 Human Growth and Development (4 hours)
- PSY 245 Children with Exceptionalities (5 hours)
- PSY 251 Adolescent Psychology (5 hours)
- PSY 261 Introduction to Child Development (5 hours)
- PSY 267 Social Psychology (5 hours)

Sociology/Anthropology

- ANTH 200 Introduction to Physical Anthropology (5 hours)*
- ANTH 201 World Prehistory (5 hours)
- ANTH 202 Introduction to Cultural Anthropology (5 hours)

ANTH 240	Introduction to Forensic Anthropology (5 hours)*
SOC 101	Introduction to Sociology (5 hours)
SOC 202	Social Problems (5 hours)
SOC 210	Sociology of Deviance (5 hours)
SOC 230	Marriage and Family Relations (5 hours)
SOC 280	American Race and Ethnic Relations (5 hours)

*Note: Students may not use ANTH 200 and ANTH 240 to satisfy both Biological Science and Social Science Requirements.

Humanities - 15 quarter hours

Option I:

HUM 111	Civilization I (5 hours)
HUM 112	Civilization II (5 hours)
HUM 113	Civilization III (5 hours)

Option II:

HUM 111	Civilization I (5 hours)
HUM 151	American Civilization to 1877 (5 hours)
HUM 152	American Civilization since 1877 (5 hours)

4. Elective Requirements – 15-20 hours

Associate of Arts students select a minimum of 20 elective hours. Associate of Science students select a minimum of 15 hours. Students may complete their degree requirements from any of the courses listed above, or below in the Transfer Module. In addition students may select electives from the following:

Business Related: ACCT 106 & 107, BMGT 111, BMGT 219, LEGL 261, 262, & 264

Foreign Languages: Arabic, Chinese, French, German, Italian, Japanese, Latin, or Spanish,

Creative Writing: ENGL 281 through ENGL 285, THEA 215

Humanities and Fine Arts: Any courses listed under ART, COMMUNICATIONS, DANCE, HISTORY, HUMANITIES, MUSIC, THEATER or ENGL 208 through 215, ENGL 225 through 245, ENGL 260 through 278, ARCH 100, MECH 120, and MECH 251.

Mathematics: MATH 105 & 106

Other elective options may be chosen from pre-approved lists available from Advising Services or the Dean of Arts and Sciences. Careful selection of Columbus State elective courses can ensure the greatest applicability of Columbus State credits to the requirements for a baccalaureate degree. Students should consult a specific college transfer guide, Transfer Assurance Guide or University Parallel Guide available from Advising Services or the Dean of Arts and Sciences. On-line transfer advising support is available at csc.edu. Go to Arts and Sciences Home Page, Course Applicability System (CAS).

5. **Capstone Experience - 3 hours.** Within the last 2 quarters prior to graduation, students must complete a “Capstone” course in the discipline of their intended major at a baccalaureate institution. The Capstone Experience should be selected in consultation with a faculty advisor.

6. **Complete a Petition to Graduate the Quarter prior to Graduation.**

Ohio Transfer Policy

Institutional Transfer

The Ohio Board of Regents in 1990, following a directive of the 119th Ohio General Assembly, developed the Ohio Articulation and Transfer Policy to facilitate students’ ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. A subsequent policy review and recommendations produced by the Articulation and Transfer Advisory Council in 2004, together with mandates from the 125th Ohio General Assembly in the form of Amended Substitute House Bill 95, have prompted improvements of the original policy. While all state-assisted colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the transfer policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Board of Regents will establish a transfer clearinghouse to receive, annotate, and convey transcripts among state-assisted colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

Transfer Module

The Ohio Board of Regents’ Transfer and Articulation Policy established the Transfer Module, which is a subset or entire set of a college or university’s general education curriculum in A.A., A.S. and baccalaureate degree programs. Students in applied associate degree programs may complete some individual transfer module courses within their degree program or continue beyond the degree program to complete the entire transfer module. The Transfer Module contains 54-60 quarter hours or 36-40 semester hours of course credit in English composition (minimum 5-6 quarter hours or 3 semester hours); mathematics, statistics and formal/symbolic logic (minimum of 3 quarter hours or 3 semester hours); arts/humanities (minimum 9 quarter hours or 6 semester hours); social and behavioral sciences (minimum of 9 quarter hours or 6 semester hours); and natural sciences (minimum 9 quarter hours or 6 semester hours). Oral communication and interdisciplinary areas may be included as additional options. Additional elective hours from among these areas make up the total hours for a completed Transfer Module. Courses for the Transfer Module should be 100- and 200-level general education courses commonly completed in the first two years of a student’s course of study. Each state-assisted university, technical and community college is required to establish and maintain an approved Transfer Module.

Transfer Module course(s) or the full module completed at one college or university will automatically meet the requirements of individual Transfer Module course(s) or the full Transfer Module at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Transfer Module at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Transfer

Module portion of Institution R's general education program. Institution R, however, may have general education courses that go beyond its Transfer Module. State policy initially required that all courses in the Transfer Module be completed to receive its benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual Transfer Module courses on a course-by-course basis.

Transfer Assurance Guides

Transfer Assurance Guides (TAGs) comprise Transfer Module courses and additional courses required for an academic major. A TAG is an advising tool to assist Ohio university and community and technical college students planning specific majors to make course selections that will ensure comparable, compatible, and equivalent learning experiences across the state's higher-education system. A number of area-specific TAG pathways in the arts, humanities, business, communication, education, health, mathematics, science, engineering, engineering technologies, and the social sciences have been developed by faculty teams.

TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisors at the institution to which a student wishes to transfer should also be consulted during the transfer process. Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged.

Students who complete Columbus State's degree requirements in Communication Skills, Mathematics, Humanities, Biological and Physical Sciences, and Social and Behavioral Sciences will automatically have completed the Transfer Module.

Transfer Module

English Composition

College Composition - 5 - 6 hours required

- ENGL 101 Beginning Composition (3) **and**
- ENGL 102 Essay and Research (3) **or**
- ENGL 111 English Composition (5)

Intermediate Composition - 5 hours required

- ENGL 250 Writing about the American Experience (5)
- ENGL 251 The American Identity (5)
- ENGL 252 Images of Men and Women in America (5)
- ENGL 253 American Regional Writing (5)

Mathematics and Logical Analysis - select a minimum of one course

Mathematics - 5 hours required

- MATH 116 Mathematics for the Liberal Arts (5)
- MATH 130 Mathematical Analysis for Business I (5)
- MATH 131 Business Calculus I (5)
- MATH 132 Business Calculus II (5)
- MATH 148 College Algebra (5)
- MATH 150 Precalculus (5)
- MATH 151 Calculus and Analytic Geometry I (5)
- MATH 152 Calculus and Analytic Geometry II (5)
- MATH 153 Calculus and Analytic Geometry III (5)
- MATH 254 Multivariable Calculus (5)
- MATH 255 Elementary Differential Equations (5)
- MATH 266 Discrete Mathematical Structures (5)
- MATH 268 Elementary Linear Algebra (5)
- MATH 285 Ordinary and Partial Differential Equations (6)

Biological and Physical Sciences - select Option I or II

OPTION I:

Integrated/Interdisciplinary

- NSCI 101 Natural Science I (5)
- NSCI 102 Natural Science II (5)
- NSCI 103 Natural Science III (5)

OPTION II: select three courses from at least two areas

Biological Sciences

- BIO 111 Introductory Biology I (5)
- BIO 112 Introductory Biology II (5)
- BIO 215 General Microbiology (5)
- BIO 125 General Botany (5)
- BIO 126 Introduction to Ecology (5)
- BIO 261 Human Anatomy (5)
- BIO 262 Human Physiology (5)
- BIO 263 Human Pathophysiology (5)
- BIO 174 Biological Sciences I (5)
- BIO 175 Biological Sciences II (5)
- BIO 201 Animal Diversity and Systemics (5)

Physical Sciences

- CHEM 111 Elementary Chemistry I (5)
- CHEM 112 Elementary Chemistry II (5)
- CHEM 113 General and Biological Chemistry (5)
- CHEM 171 General Chemistry I (5)
- CHEM 172 General Chemistry II (5)
- CHEM 173 General Chemistry III (5)
- GEOL 121 Physical Geology (5)
- PHYS 117 College Physics - Mechanics and Heat (5)
- PHYS 118 College Physics - Elect, Magnetism & Light (5)
- PHYS 119 College Physics - Modern Physics (5)
- PHYS 177 General Physics I (5)
- PHYS 178 General Physics II (5)
- PHYS 179 General Physics III (5)

Arts/Humanities - select Option I or Option II

OPTION I: select one of the Civilization sequences

Integrated/Interdisciplinary

- HUM 111 Civilization I (5) and
- HUM 112 Civilization II (5) and
- HUM 113 Civilization III (5) **or**
- HUM 111 Civilization I (5) and
- HUM 151 American Civilization to 1877 (5) and
- HUM 152 American Civilization since 1877 (5)

OPTION II: select three courses from at least two areas

Interdisciplinary

- HUM 205 Medicine and the Humanities (5)
- HUM 222 Classical Mythology (5)
- HUM 245 Music and Art Since 1945 (5)

Western Arts

- ART 101 History of Western Art (5)
- MUS 101 History of Western Music (5)

Philosophy

- PHIL 101 Introduction to Philosophy (5)
- PHIL 130 Ethics (5)
- PHIL 270 Philosophy of Religion (5)

World/Non-Western Cultures

- HUM 251 History of Latin America (5)
- HUM 252 The Islamic World and the Middle East (5)
- HUM 253 History of China and Japan (5)
- HUM 254 Introduction to African Literature (5)
- HUM 270 Comparative Religions (5)

Literature

- ENGL 230 Introduction to Dramatic Literature (5)
- ENGL 235 Introduction to Poetry (5)

ENGL 240	Introduction to Science Fiction (3)
ENGL 262	Survey of British Literature (5)
ENGL 264	Introduction to Shakespeare (5)
ENGL 265	Modern European Lit. in Translation (5)
ENGL 270	Black American Writers (5)
ENGL 276	Women in Literature (5)
ENGL 274	Introduction to Non-Western Literature (5)

Social and Behavioral Sciences - select Option I or Option II

OPTION I: select three courses from the following Integrated/Interdisciplinary

SSCI 101	Cultural Diversity (5)
SSCI 102	American Popular Culture(5)
SSCI 105	Law and Society (5)

OPTION II: select three courses from at least two areas Economics/Geography

ECON 100	Introduction to Economics (5)
ECON 200	Principles of Microeconomics (5)
ECON 240	Principles of Macroeconomics (5)
GEOG 200	World Regional Geography (5)

Political Science

POLS 101	Introduction to American Government (5)
POLS 165	Introduction to Politics (5)

Psychology

PSY 100	Introduction to Psychology (5)
PSY 200	Educational Psychology (5)
PSY 230	Abnormal Psychology (5)
PSY 235	Psychology of Adjustment (3)
PSY 240	Human Growth and Development (4)
PSY 261	Introduction to Child Development (5)
PSY 267	Social Psychology (5)

Sociology/Anthropology

ANTH 200	Introduction to Physical Anthropology (5)
ANTH 201	World Prehistory (5)
ANTH 202	Introduction to Cultural Anthropology (5)
ANTH 240	Forensic Anthropology (5)
SOC 101	Introduction to Sociology (5)
SOC 202	Social Problems (5)
SOC 210	Sociology of Deviance (5)
SOC 230	Marriage and Family Relations (5)
SOC 280	American Race and Ethnic Relations (5)

Conditions for Transfer Admission

1. Ohio residents with associate degrees from state-assisted institutions and a completed, approved Transfer Module shall be admitted to a state institution of higher education in Ohio, provided their cumulative grade point average is at least 2.0 for all previous college-level courses. Further, these students shall have admission priority over out-of-state associate degree graduates and transfer students.
2. When students have earned associate degrees but have not completed a Transfer Module, they will be eligible for preferential consideration for admission as transfer students if they have grade point averages of at least a 2.0 for all previous college-level courses.
3. In order to encourage completion of the baccalaureate degree, students who are not enrolled in an A.A. or A.S. degree program but have earned 60 semester or 90 quarter hours or more of credit toward a baccalaureate degree with a grade point average of at least a 2.0 for all previous college-level courses will be eligible for preferential consideration for admission as transfer students.
4. Students who have not earned an A.A. or A.S. degree or who

have not earned 60 semester hours or 90 quarter hours of credit with a grade point average of at least a 2.0 for all previous college-level courses are eligible for admission as transfer students on a competitive basis.

5. Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at the institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

Acceptance of Transfer Credit

To recognize courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution, transfer credit will be accepted for all successfully completed college-level courses completed in and after fall 2005 from Ohio state-assisted institutions of higher education. Students who successfully completed A.A. or A.S. degrees prior to fall 2005 with a 2.0 or better overall grade point average would also receive credit for all college-level course they have passed. (See Ohio Articulation and Transfer Policy, Definition of Passing Grade and Appendix D) While this reflects the baseline policy requirement, individual institutions may set equitable institutional policies that are more accepting.

Pass/fail courses, credit by examination courses, experiential learning courses, and other nontraditional credit courses that meet these conditions will also be accepted and posted to the student record.

Responsibility of Students

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Students should use the Transfer Module, Transfer Assurance Guides, and Course Applicability System for guidance in planning the transfer process. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

Appeals Process

Following the evaluation of a student transcript from another institution, the receiving institution shall provide the student with a statement of transfer credit applicability. At the same time, the institution must inform the student of the institution's appeals

process. The process should be multi-level and responses should be issued within 30 days of the receipt of the appeal.

The Columbus State Community College appeals process begins after the student with previous college credit receives an e-mail, which indicates that some previous coursework may not be applicable to the student's new degree. The e-mail explains the procedure for requesting a second evaluation of the transcript. If the re-evaluation is not satisfactory to the student, the student may then appeal by asking the Registrar to initiate the next step in the appeals process, which consists of a review of the transcript and supporting documentation by the department housing the academic discipline of the course(s) in question. Appeals denied at the department level will automatically be forwarded to the Dean of Arts and Sciences for a final decision on behalf of the college. If the appeal is denied at this level, the student will be advised in writing of the reasons for the denial and how to appeal to the state level.

Fulfillment of the associate of arts or associate of science degree requirements assures fulfillment of transfer module requirements.

Columbus State Community College Transfer Agreements

Columbus State Community College has established transfer agreements with the following institutions. Please see your academic advisor for specific transfer course information.

Associate of Arts and Associate of Science Degrees to B.A. and B.S. Degrees

Antioch College
Ashland University
Capital University
Central State University
Franklin University
Ohio Dominican University
Ohio University
The Ohio State University - All Colleges
Otterbein College
Shawnee State University
University of Akron
University of Cincinnati- School of Planning, College of Design, Art, Architecture and Planning
University of Toledo
Wilberforce College

Online B.A. Degree Completion

University of Toledo: Associate of Arts
A.A.S. in Technical Communication
A.A.S. in Health Information Management

Degree Completion Programs for all Columbus State Degrees

Ashland University
Capital University
Central State University
Devry University

Franklin University
Ohio Dominican College
Otterbein College
The University of Akron
University of Phoenix
Wilberforce University
Shawnee State University

Guaranteed Admission to all Graduates of Columbus State (A.A., A.S., or A.A.S.)

Ashland University
Central State University
Ohio Dominican College
Otterbein College
Shawnee State University
The University of Akron
University of Phoenix
Wilberforce University

Technology Specific Agreements for Associate of Applied Science Degrees

Bethel College

Interpreting/American Sign Language Education

Cleveland State University College of Business Administration

Supply Chain Management (Logistics)
Marketing

Ohio Christian University:

Accounting
Business Management
Early Childhood Development
Nursing

Devry University:

Accounting
Business Management
Computer Information Technology
Electronic Engineering Technology

Embry-Riddle Aeronautical University:

Aviation Maintenance Technology

Florida International University:

Hospitality Management to Hotel and Food Service Mgmt.

Miami University:

Electronic Engineering Technology
Electro-Mechanical Engineering Technology
Mechanical Engineering Technology

Mount Carmel College of Nursing

A.A.S. in Nursing to B.S. in Nursing

Mount St. Joseph College:

All A.A.S. degrees in Health, Human and Public Services

Northern Kentucky University:

A.A.S. in Construction Management to B.S. in Construction Management

Ohio University:

All A.A.S. degrees in Health, Human and Public Services
Hospitality Management to Hotel and Food Service Mgmt.

The Ohio State University

A.A. with Business concentration to B.S. Business Education

A.A.S. in Business Management, Construction Management, Nursing, Engineering Technologies, and Applied Technologies to B.S. in Technical Education and Training,

College of Education.
A.A.S. in Construction Management leading to the B.S. in
Agriculture–Construction Systems Management
A.A.S. in Mechanical Engineering to B.S. in Industrial
Technology Education

Sullivan University

Hospitality Management

Tiffin University

Business Management to BS in Business Administration
Law Enforcement to BS in Criminal Justice

United States Sports Academy

Sport and Exercise Studies to Bachelor of Sport Science
Associate of Arts or Associate of Science to Bachelor of
Sport Science

University of Cincinnati

Chemical Dependency to Addictions Major, Sociology

University of Rio Grande:

Associate of Science Degree to B.S. in Mathematics

University of Toledo

Electronic Engineering Technology to Computer and
Information Science Technology
Health Information Management to Health Information
Management
Technical Communication to B.A. in Liberal Studies

Graduation Requirements: Associate of Applied Science Degree

Requirements of All Graduates

1. The satisfactory completion of 90-110 quarter credit hours as required by the particular program.
2. The attainment of a “C” (2.00) average in all technical courses and a “C” (2.00) average in all nontechnical courses.
3. The completion of no fewer than 35 of the required credit hours, including no fewer than 20 credit hours in technical courses approved by the department chairperson, while in attendance at Columbus State Community College. Credits by examination/proficiency, nontraditional credit, and transfer credit do not apply toward meeting residency credit hour requirements.
4. All students must file a “Petition to Graduation” during the quarter preceding their graduation quarter. Refer to page 28 of this Catalog for complete details.

General Education Requirements

1. 12 credit hours in English/Communication Skills:
ENGL 101, ENGL 102 (students placing into ENGL 111 can take ENGL 111 instead of ENGL 101 AND ENGL 102),
COMM 105, COMM 110 or COMM 115 (depending on the technology requirement), and one of the following three courses: ENGL 200, ENGL 202, or ENGL 204.
2. Five credit hours in Humanities: HUM 111, HUM 112, HUM 113, HUM 151, HUM 152, or HUM 224.
3. Five credit hours in Social and Behavioral Sciences for students in Engineering and Health and Human Services degree programs: SSCI 101, SSCI 102, SSCI 104, or SSCI 105.
Five credit hours in Biological and Physical Sciences for stu-

dents in the Business and Public Services degree programs:
NSCI 101 or BIO 104 & 105.

Following are exceptions to this requirement:

- a. Mental Health/Chemical Dependency/Mental Retardation students must take BIO 112 to fulfill the requirement.
- b. Early Childhood Development, and Interpreting/Translating students must take NSCI 101 or BIO 104 & 105 to fulfill the requirement.
- c. Computer Information Technology, Dietetic Technician Major, EDP Auditing and Medical Office Administration students must take SSCI 101, SSCI 102, SSCI 104 or SSCI 105 to fulfill the requirements.

Basic Studies Requirements

Each technical program requires completion of at least 21 credit hours in Basic Studies. Basic Studies are those that provide students with the scientific and theoretical foundations of their technology, or those that provide students with an understanding of the legal, social, economic, or political environments within which they will practice their technology. Courses that fulfill the Basic Studies requirements vary from program to program. They are listed in the following section, with the listings of technical program requirements.

Technical Studies Requirements

Each technical program requires completion of 45 to 67 credit hours in courses clearly identifiable with the technical skills, proficiency, and knowledge required for career competency. Technical studies requirements also vary from program to program; they are also listed in the following section by program.

Students need to work closely with an assigned advisor to assure they meet all requirements for graduation. The student is responsible for meeting all requirements.

Graduation Requirements: Associate of Technical Studies Degree— “Designing Your Own Degree”

Application Procedures

The Associate of Technical Studies Degree program enables a student to design an individualized program of study to fulfill a unique career goal that cannot be met through the completion of any one of the College’s technical programs. This is accomplished by selecting courses from up to four different technical disciplines, thereby fashioning a coherent technical program. In order to be considered for admission to this program, an applicant must:

1. Demonstrate a level of maturity and motivation which gives promise of successfully handling the responsibilities inherent in this program.
2. Satisfy the general admission requirements of Columbus State Community College.
3. Prepare and submit the Associate of Technical Studies (ATS) application, which includes the proposed program of study.

To prepare and submit the ATS application, applicants should first, call Advising Services in Aquinas Hall 116 to set up an appointment with an academic advisor, 614-287-2668. The advisor will then provide the application to the student. Second, the student should submit the application draft, which includes a personal statement and rationale for the ATS program.

The application will then be reviewed and the degree content will be developed by the Office of the Dean of Career and Technical Programs. Upon final approval, the Dean's office will identify the faculty advisor(s) or others with whom the student will work for their ATS program.

Columbus State reserves the right not to approve any ATS request that, in the opinion of the appropriate department chair or dean, does not contain depth, rigor, and coherence at levels comparable with existing career and technical degree programs.

Graduation Requirements of all ATS Graduates

1. The satisfactory completion of 90-110 credit hours.
2. The attainment of a C (2.00) average in all technical courses, and a C (2.00) average in all non-technical courses.
3. The completion of no fewer than 35 of the required credit hours, including no fewer than 20 credit hours in technical courses approved by the department chairperson(s), while in attendance at Columbus State Community College. Credit by examination/proficiency, nontraditional credit, and transfer credit do not apply toward meeting residency credit hour requirements.

4. All students must file a Petition to Graduate during the quarter preceding their graduation quarter. Refer to page 28 of this Catalog for complete details.

Specific Program Requirements

In this section, the requirements for Columbus State's Programs of Study are listed alphabetically by department or technology. After you have located the program you are interested in, you will find a listing of the courses to be taken. The first three or four alpha identifiers of each course number indicate which department offers the course. For example, course numbers beginning with EET are all from the Electronic Engineering Technology and VET indicates Veterinary Technician Technology. A chart in the Course Description Section shows all the departments and their corresponding numbers.

Honors Program

Columbus State offers an honors program for eligible students. Honor courses offer students more challenging, faster-paced coursework. Courses in English, Humanities, and Social Sciences will be open to students who have completed or placed into ENGL 111, and have received permission from the Director of the Honors Program. Please see the quarterly list of course offerings for the complete listing of honors courses. For more information on the honors program, please call (614) 287-2512.

Notes

Academic Programs

ARTS AND SCIENCES DIVISION

Associate of Arts Degree

Associate of Science Degree

A.A.S. in Technical Communication

CAREER AND TECHNICAL PROGRAMS

(A.A.S. Degrees unless title contains the word certificate")

Accounting

Bookkeeping Certificate
Certificate of Accounting Concentration
Certificate of Internal Audit

Applied Technologies

Apprenticeship Partnership Degree Programs
Associate of Technical Studies in Construction Trades
Facilities Maintenance
Facilities Maintenance Certificate

Appraisal

Certification Licensing

Architecture

Architecture Transfer Option
3D Visualization Certificate
Facility Management Certificate

Automotive Technology

Vocational Education Transfer Option with The Ohio State University
Automotive Service Management Major
Ford ASSET Program
Maintenance and Light Repair Certificate
TechLINK Program
YAATC

Aviation Maintenance Technology

Aviation Maintenance Technician Certificate

Business Management

Vocational Education Transfer Option with The Ohio State University
Business Management Major
Small Business Management Major
Leadership Development Certificate
Training and Development Certificate
Managing Interpersonal Skills Certificate
Nonprofit Management Certificate
Pre-MBA Certificate

Civil Engineering Technology

Civil Track
Survey Track
Surveying Certificate

Computer Information Technology

Vocational Education Transfer Option with The Ohio State University
Network Administrator Track
Software Developer Track
User Support Technician Track
Web Developer Track
Computer Literacy Certificate
Database Specialist Certificate
Information Security Certificate
Network Administrator Certificate
User Support Specialist Certificate

Construction Management

Vocational Education Transfer Option with The Ohio State University
Estimating/Bidding Certificate
Field Supervision Certificate
Residential Construction Management Certificate

Dental Hygiene

Dental Laboratory Technology/Small Business Management (ATS)

Dental Laboratory Technology Certificate

Digital Design and Graphics

Desktop Publishing Certificate
Digital Design Certificate
Digital Media Certificate

Digital Photography

Photography Certificate

Early Childhood Development

Child Care Administration Certificate
Child Development Association (CDA) credential preparation

Electro-Mechanical Engineering Technology

Electronic Engineering Technology

Computer Electronics Major

Emergency Medical Services Technology

EMT-Basic Certificate
EMT-Paramedic Certificate

EMS/Fire Science (ATS)

Engineering Technologies Certificates

Computer Aided Drafting Technician Certificate
Engineering Assembly Technician Certificate
Engineering Technician Certificate
Manufacturing Maintenance Technician Certificate

Environmental Science, Safety and Health

Health and Safety for Hazardous Waste Operations Certificate
Occupational Health and Safety Certificate
Sustainable Building Certificate
Water/Wastewater Technology Certificate

Finance

Fire Science

Geographic Information Systems

GIS Certificate

Health Information Management Technology

Medical Coding Specialist Certificate

Heating, Ventilating and Air Conditioning Technology

High Pressure Boiler License Training Program
Large Commercial Certificate
Residential/Light Commercial Certificate

Hospitality Management

Chef Apprenticeship Major
Dietetic Technician Major
Food Service/Restaurant Management Major
Travel/Tourism/Hotel Management Major
Baking Certificate
Dietary Manager Certificate
Travel Industry Certificate

Human Resources Management Technology

Interactive Media

Digital Audio/Video Production Major
Webtech: Web Design Certificate

Interpreting/American Sign Language Education

American Sign Language/Deaf Studies Certificate

Landscape Design/Build

Law Enforcement

Corrections Major
Law Enforcement Major
Law Enforcement Management Major
Law Enforcement Major - Academy Track

Marketing

Customer Service Major
Direct Marketing Major
Retail Management Major
Direct Marketing Certificate
Pre-MBA Certificate

Massage Therapy

Massage Therapy Certificate

Mechanical Engineering Technology

Medical Assisting (ATS)

Medical Assisting Certificate

Medical Laboratory Technology

Mental Health/Chemical Dependency/Mental Retardation

Mental Health Track
Chemical Dependency Track
Mental Retardation Track
Substance Abuse Prevention Track
Advanced Chemical Dependency Certificate
Community Living Specialist Certificate
Prevention Specialist Certificate
Advanced Mental Health Certificate
Advanced Mental Retardation Certificate

Multi-Competency Health

Patient Care Degree Track
Animal Assisted Therapy in Education Certificate
Basic Electrocardiography Certificate
Health Care Manager Certificate
Histology Certificate

Nuclear Medicine Technology

Nursing

Practical Nursing Program
Complementary Care Certificate
Nurse Aide Training Program Certificate
Patient Care Skills Certificate
Pranic Healing Certificate
Registered Nurse First Assistant Certificate
Train the Trainer Nurse Aide Certificate
Vocational Education Transfer Option with The Ohio State University

Office Administration

Administrative Assistant Major
Administrative Assistant Legal Cognate
Administrative Assistant Medical Cognate
Office Skills Certificate

Paralegal Studies

Paralegal Studies Certificate (Post Baccalaureate Option)

Quality Assurance Technology

Radiography

Real Estate

Respiratory Care

Registered Respiratory Therapist Program

Sport and Exercise Studies

Exercise Specialist Certificate
Exercise Science Major
Physical and Recreational Instructor Major
Sport Management Major

Supply Chain Management

International Commerce Major
Purchasing Major
International Commerce Major
Supply Chain Management Certificate
Purchasing Certificate

Surgical Technology

Surgical Technology Certificate

Veterinary Technology

Accounting

Accounting Associate Degree Bookkeeping Certificate Certificate of Accounting Concentration Certificate of Internal Auditing

Accountants, and the theoretical principles they use in their work, stand at the very center of our financial and economic activities. Economists, investors, business executives, labor leaders, bankers, and government officials all rely upon financial statements and other reports prepared by accountants to summarize and interpret the multitude of financial transactions that comprise day-to-day economic activity. The true value of an accountant is measured by his or her ability to develop and present understandable, reliable analyses of financial positions and the results of operations upon which business decisions are based.

The Accounting Associate Degree program prepares graduates for employment as accountants in business, industry, and government. Many experienced accountants become owners/operators of their own public accounting firms. The program emphasizes the use of personal computers along with manual procedures of accounting. The Accounting Associate Degree program is ideally suited to the needs of those who wish to take the Ohio CPA Examination with qualifying examinations upon graduation.

Bookkeeping Certificate

The one-year Bookkeeping Certificate program develops the competencies needed for success as a full-charge bookkeeper. Credits earned in the Certificate program may be applied to an Associate Degree in Accounting, or other business technologies.

Certificate of Accounting Concentration

The Certificate of Accounting Concentration is intended for individuals who possess a bachelor's, master's, or Ph.D. in an area other than accounting and want to qualify under Ohio law to sit for the Ohio CPA exam. The 62 hours of course work recommended would provide candidates with the broadest possible knowledge of all four parts of the Ohio exam.

Certificate of Internal Auditing

The Certificate of Internal Audit program develops the competencies required for today's internal auditor or the business professional involved with, or responsible for, related issues. The topics covered in this certificate program include Sarbanes-Oxley compliance, internal auditing, operational auditing, fraud control, and fraud prevention. These topics will be covered in eight five-week courses. Courses meet one evening per week, making them convenient for the working professional. This certificate can be obtained easily in a year by taking one course at a time.

Traditional Classes and Distance Learning Choices at Columbus State

The Accounting program offers both traditional and distance learning options for students. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at the main campus and off-campus locations. Accounting also offers distance learning courses, which provide the same high quality learning as traditional instruction, and provide the flexibility of completing course work online or through video based instruction.

Upon completion of the Associate Degree in Accounting, the graduate will be able to:

- Apply generally accepted accounting principles to measure, process, and communicate financial information about a business entity.
- Use accounting computer software to maintain accounting records and prepare financial statements.
- Apply theory and practical applications of job order, process, and activity-based cost systems, including the evaluation of actual to standard costs.
- Prepare systems flowcharts and evaluate the internal control of a business system.
- Compare and use financial statements for decision-making purposes.
- Explain the purpose and standards for an independent audit.
- Explain the procedures used in applying auditing standards in conducting an independent audit.
- Prepare budgets and forecasts for financial decisions.
- Identify and describe each of the rules contained in the AICPA Code of Professional Conduct.
- Prepare individual income tax returns and research tax questions.
- Prepare federal, state, and local payroll tax returns as well as franchise and personal property tax returns.

Accounting Associate Degree

COURSE

Quarter 1

ENGL 101	Beginning Composition	3
BMGT 111	Management	5
ACCT 106	Financial Accounting	5
ACCT 107	Managerial Accounting	5
ECON 200	Principles of Microeconomics	5
TOTAL CREDIT HOURS	.....	23

Quarter 2

ENGL 102	Essay & Research	3
SSCI 104	World Economic Geography	5
ACCT 108	Introduction to Accounting III	4
ACCT 126	Accounting Systems.....	4
HUM XXX	Humanities 111,112,113,151, 152 or 224	5
TOTAL CREDIT HOURS	.....	21

Quarter 3

ENGL 200	Business Communications	3
COMM 105	Speech	3
ACCT 250	Intermediate Accounting I.....	4
ACCT 231	State & Local Taxation	4
ACCT 211	Cost Accounting.....	4
TOTAL CREDIT HOURS	.....	18

Quarter 4

MATH 135	Elementary Statistics	5
ACCT 252	Intermediate Accounting II	4
ACCT 221	Fundamentals of Finance	4
ACCT 232	Federal Taxation I	4
TOTAL CREDIT HOURS	.....	17

Quarter 5

ACCT 253	Intermediate Accounting III	4
ACCT 236	Federal Taxation II	4
ACCT 222	Financial Analysis	4
ACCT 241	Auditing I, Principles	4
TOTAL CREDIT HOURS	.....	16

Quarter 6

BMGT 272	Case Studies in Business Seminar	3
ACCT XXX	Accounting Technical Elective	4
ACCT 242	Auditing II, Applications	3
LEGL 265	Business Law for Accountants	5
TOTAL CREDIT HOURS	.....	15
TOTAL DEGREE CREDIT HOURS	.....	110

Technical Elective must be selected from the following list of courses:

ACCT 121	Data Processing for Accountants.....	4
ACCT 258	Advanced Accounting.....	4
ACCT 266	Public Admin./Fund Accounting	4
ACCT 271	Accounting Practicum*.....	3
ACCT 272	Practicum Seminar*.....	1
ACCT 275	Fraud Examination I	2
ACCT 276	Fraud Examination II.....	2
ACCT 281	Sarbanes-Oxley Act I.....	2
ACCT 282	Sarbanes-Oxley Act II.....	2
ACCT 291	Internal Audit I.....	2
ACCT 292	Internal Audit II.....	2
ACCT 293	Operational Auditing.....	2
ACCT 294	Internal Audit – Special Topics.....	2
ACCT 295-299	Studies in Contemporary Accounting	1-5

* Must be taken together

Bookkeeping Certificate

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
MATH 102	Beginning Algebra I	4
CIT 101	PC Application 1	3
ACCT 106	Financial Accounting	5
TOTAL CREDIT HOURS		15
Quarter 2		
ENGL 102	Essay and Research	3
OADM 131	Keyboarding I	3
LEGL 261	Business Law I.....	3
ACCT 121	Data Processing for Accountants	4
ACCT 107	Managerial Accounting	5
TOTAL CREDIT HOURS		18
Quarter 3		
ENGL 200	Business Communications	3
OADM 132	Keyboarding II	3
ACCT 108	Introduction To Accounting III.....	4
ACCT 126	Accounting Systems	4
TOTAL CREDIT HOURS		14
Quarter 4		
HUM XXX	Humanities 111,112,113,151,152 or 224	5
ACCT 201	Intermediate Accounting I.....	4
ACCT 231	State & Local Taxation	4
ACCT 211	Cost Accounting OR	4
ACCT 232	Federal Taxation.....	4
TOTAL CREDIT HOURS		17
TOTAL CERTIFICATE CREDIT HOURS		64

Certificate of Accounting Concentration

COURSE		CR
Quarter 1		
ACCT 106	Financial Accounting	5
ACCT 107	Managerial Accounting	5
TOTAL CREDIT HOURS		10
Quarter 2		
ACCT 108	Introduction to Accounting III	4
ACCT 126	Accounting Systems	4
TOTAL CREDIT HOURS		8
Quarter 3		
ACCT 251	Intermediate Accounting I.....	4
ACCT 211	Cost Accounting.....	4
TOTAL CREDIT HOURS		8
Quarter 4		
LEGL 265	Business Law for Accountants.....	5
ACCT 252	Intermediate Accounting II	4
ACCT 232	Federal Taxation I.....	4
TOTAL CREDIT HOURS		13
Quarter 5		
ACCT 253	Intermediate Accounting III	4
ACCT 236	Federal Taxation II.....	4
ACCT 241	Auditing I, Principles	4
TOTAL CREDIT HOURS		12
Quarter 6		
ACCT 266	Public Admin/Fund Accounting	4
ACCT 242	Auditing II, Applications	3
TOTAL CREDIT HOURS		11
TOTAL CERTIFICATE CREDIT HOURS		62

COURSE		CR
Quarter 1		
ACCT 275	Fraud Examination I	2
ACCT 276	Fraud Examination II.....	2
TOTAL CREDIT HOURS		4
Quarter 2		
ACCT 281	Sarbanes Oxley I.....	2
ACCT 282	Sarbanes Oxley II.....	2
TOTAL CREDIT HOURS		4
Quarter 3		
ACCT 291	Internal Audit I.....	2
ACCT 292	Internal Audit II.....	2
TOTAL CREDIT HOURS		4
Quarter 4		
ACCT 293	Operational Auditing.....	2
ACCT 294	Internal Audit – Special Topics.....	2
TOTAL CREDIT HOURS		4
TOTAL CERTIFICATE CREDIT HOURS		16

Certificate of Internal Auditing

Applied Technologies

Apprenticeship Partnership Degree Programs Associate of Technical Studies in Construction Trades

Introduction to the Construction Industry Facilities Maintenance Associate Degree Facilities Maintenance Certificate

The mission of Applied Technologies is to develop and implement partnership programs with area employers that include the use of college coursework as a part of their employee career preparation programs. The department collaborates with local industry partners to custom build certificate and/or degree programs that will best meet their educational and training needs. These programs can include employer-specific courses as well as integration of their employees into mainstream college coursework.

The goal of this initiative is to meet all of the educational and training needs of employers at all levels within their organization. These partnerships actively involve local employers in the educational process, including recruiting, selection, curriculum development, related work experience, and final placement.

Apprenticeship Partnership Degree Programs

These Applied Technologies degree programs are part of partnerships between area skilled trades apprenticeship programs and the College. Participation in these programs is limited to students who are currently enrolled in the full-time apprenticeship programs offered by the College's industry partner trades organizations.

Students in the Applied Technologies degree programs combine apprenticeship courses, advanced technical coursework, and basic and general education courses to earn an Associate of Applied Science in Applied Technologies. Electrician, carpentry, millwright and operating engineer majors are currently available.

For further information about this program, please contact (614) 287-5211.

Associate of Technical Studies in Construction Trades

In partnership with several central Ohio skilled trades apprenticeship programs, the College offers apprentices the opportunity to earn college credit in their apprenticeship programs. Students are awarded college credit for technical courses taken during each year of the apprenticeship, leading to a certificate in the program upon successful completion of their apprenticeship. Students who wish to continue their education can apply the credits they have earned toward an Associate of Technical Studies in Construction Trades with a technical minor in their trade. All Applied Technology partnership programs have restricted enrollment, requiring that participants are accepted into their respective trade apprenticeship programs.

For more information about the Applied Technologies programs, please contact (614) 287-5211.

For information on how to build a college degree program for your industry or for your specific company, please contact Dr. Andy Rezin, Administrator, (614) 287-5303, e-mail: arezin@csc.edu.

Introduction to the Construction Industry

Applied Technologies has developed a series of courses to provide foundational information about the construction industry. These courses are intended to address the needs of everyone from the casual observer who simply wants to gain a better understanding of the construction industry to those who are seriously considering a career in construction. The courses provide information about career opportunities in the construction industry, ranging from the skilled trades to architecture, design, and management. They explore the skills and knowledge needed to be successful in each of these career paths. Finally, they help students who are interested in a career in construction to prepare themselves to be better candidates to enter into a formal program of study to attain their career goals.

Introduction to the Construction Industry

APPL100	The Construction Industry	2
APPL109	Basic Skills for the Construction Industry	3
APPL119	The Construction Trades	3

Facilities Maintenance

The Facilities Maintenance program prepares individuals for careers in technical jobs supporting the maintenance, upkeep, and light repair of commercial, industrial, and other multi-family properties. Facilities maintenance requires that employees have a broad range of knowledge and skills across multiple trades. The technical coursework in this program provides education and training in five of the core technical skill areas: carpentry, electricity, plumbing, heating and air conditioning, and welding. In addition, the nontechnical coursework provides the theoretical knowledge necessary to support the technical content.

Area facilities managers have been consulted and involved in the development of this program. Its goal is to prepare entry-level workers and to provide opportunities for ongoing training for current employees in this growing industry. Upon completion of the program students earn an Associate Degree of Applied Science in Applied Technologies–Facilities Maintenance Major. The program is designed to:

- Provide students with basic skills and knowledge in the core trades of carpentry, electricity, plumbing, heating and air conditioning, and welding.
- Provide students with the foundational academic skills to support their success in trades-related employment.
- Prepare students for entry-level position in facilities maintenance.

With their knowledge in this wide-range of technical trades, graduates will be prepared to enter the workforce as facilities maintenance technicians. Those who are interested in specializing in a specific trade may use this education as a foundation to help them qualify for entry into any of a variety of skilled trades apprenticeship programs. These 4-to 5-year programs combine full-time employment with additional related technical training leading to journeyman status.

Facilities Maintenance Associate Degree

COURSE	CR
Quarter 1	
ENGL101 Basic Composition	3
CMGT135 Safety & Loss Prevention	3
MATH111 Technical Mathematics	4
APPL115 Introduction to Carpentry.....	4
APPL134 Introduction to Plumbing.....	4
TOTAL CREDIT HOURS	18

Quarter 2	
ENGL102 Essay & Research	3
CMGT115 Building Construction Methods.....	3
CIT101 PC Applications I.....	3
APPL125 Introduction to Electrical Work.....	4
HAC161 Hand Tools Laboratory	4
TOTAL CREDIT HOURS	17

Quarter 3	
ENGL200 Business Communications	3
HUMXXX Humanities 111, 112, 113, 151, 152, or 224	5
ARCH110 Construction Drafting - Manual I	2
APPL107 Introduction to Welding	4
CMGT253 Residential Construction.....	3
TOTAL CREDIT HOURS	17

Quarter 4	
SSCIXXX 100, 101, 102, 104, or 105	5
ARCH112 Construction Drafting–CAD I.....	2
APPL108 Fundamentals of MIG Welding.....	4
APPL116 Carpentry–Structural Framing	4
APPL126 Electrical–Basic Wiring, Grounding & Circuits	4
TOTAL CREDIT HOURS	19

Quarter 5	
COMM105 Speech.....	3
MULT104 Adult & Pediatric CPR.....	1
APPL135 Plumbing–Fixtures, Valves, and Faucets	4
HAC141 Principles of Refrigeration.....	4
APPL109 MIG-TIG Welding Applications	4
TOTAL CREDIT HOURS	16

Quarter 6	
APPL117 Carpentry–Interior /Exterior Repair and Renovation	4
APPL127 Electrical–Repair and Renovation	4
APPL136 Plumbing–Repair and Renovation	4
HAC116 Piping Systems.....	3
TOTAL CREDIT HOURS	15
TOTAL DEGREE CREDIT HOURS	102

Facilities Maintenance Certificate Program

This short-term certificate program prepares students for employment as entry-level maintenance workers. The program can be completed in as little as three quarters. Since the certificate shares coursework with the Associate Degree Program, graduates have the options of immediately entering the workforce, continuing on at Columbus State to complete the Associate Degree in Facilities Maintenance, or doing both, now or in the future.

COURSE	CR
Quarter 1	
APPL100 The Construction Industry	2
APPL109 Basic Skills for the Construction Industry.....	3
APPL119 The Construction Trades.....	3
APPL 107 Introduction to Welding	4
TOTAL CREDIT HOURS	12

Quarter 2	
APPL115 Introduction to Carpentry.....	4
APPL125 Introduction to Electrical Work.....	4
APPL134 Introduction to Plumbing	4
Brake Systems Theory & Operation	4
HAC141 Principles of Refrigeration.....	4
Electrical Systems Theory & Operation	4
TOTAL CREDIT HOURS	16

Quarter 3 ELECTIVES (Select 4 courses out of the following list)	
APPL108 Fundamentals of MIG Welding.....	4
APPL116 Carpentry–Structural Framing	4
APPL126 Electrical–Basic Wiring, Grounding and Circuits	4
APPL135 Plumbing–Fixtures, Valves, and Faucets	4
HAC161 Hand Tools Laboratory (HVAC).....	4
TOTAL CREDIT HOURS	16
TOTAL CERTIFICATE CREDIT HOURS	44

Appraisal

Appraisal Associate Degree

The associate degree program in Real Estate Appraisal offers the coursework that meets the standards of professionalism in the appraisal industry and the educational requirements for appraisal registration, licensure, and certification in the state of Ohio.

The program meets the career objectives of persons interested in real estate appraisal and allied real estate professions. Licensed appraisers will find that the program provides training to upgrade their professional competence and to meet future education requirements. For students who plan to continue their education beyond the Associate Degree, it offers credit courses that may transfer to some four-year colleges and universities.

Continuing Education

Only courses approved by the Ohio Division of Real Estate and Professional Licensing qualify for continuing education credit for licensed appraisal professionals. Please check with the Real Estate Department staff or the Ohio Division of Real Estate and Professional Licensing for course approval before enrolling. Before registering for classes, students should contact the Real Estate Department if they are interested in taking 1) only classes to prepare for specific appraisal goals, or 2) only selected courses to meet continuing education requirements of the Ohio Division of Real Estate and Professional Licensing.

Columbus State offers the 7-Hour and 15-Hour National USPAP update courses quarterly.

Upon completion of the Associate Degree in Appraisal, the graduate will be able to:

- think critically and solve problems
- communicate effectively
- recognize the value of human diversity
- demonstrate interpersonal and life management skills
- determine the best method to arrive at real property value
- complete various standard appraisal forms and reports
- demonstrate market analysis techniques and applications
- complete appraisals for all real property including but not limited to, residential, commercial, business and agricultural
- apply appropriate technology as needed within the appraisal profession
- continue appraisal education.

Appraisal Associate Degree

Courses	CR
First Quarter	
APPR 101 Principles of Appraisal	3
ENGL 101 Beginning Composition	3
MATH 110 Condensed Algebra II	5
REAL 101 Principles and Practices	4
REAL 102 Real Estate Law	4
TOTAL CREDIT HOURS	19

Second Quarter	
APPR 102 Procedures of Appraisal	3
CIT 101 PC Applications	3
COMM 105 Speech	3
ENG 102 Essay & Research	3
HUM XXX 111, 112, 113, 151, 152 or 224	5
TOTAL CREDIT HOURS	17

Third Quarter	
APPR 235 Residential Market Analysis and Highest & Best Use	2
APPR 284 USPAP and Fair Housing	2
CIT 102 PC Applications 2	3
ENGL 200 Business Communications	3
GIS 100 Acquiring GIS Data	3
NSCI 101 Natural Science 1	5
TOTAL CREDIT HOURS	18

Fourth Quarter	
ACCT 106 Introduction to Accounting I	5
APPR 240 Residential Site Valuation and Cost Approach	2
CMGT 253 Residential Construction	3
ECON 200 Principles of Microeconomics	5
REAL 111 Real Estate Finance	2
TOTAL CREDIT HOURS	17

Fifth Quarter	
APPR 115 Report Writing/Case Studies	2
APPR 250 Residential Sales Comparison and Income Approaches	3
BMGT 111 Business Management	5
ECON 240 Principles of Macroeconomics	5
REAL 270 Real Estate Investing	3
TOTAL CREDIT HOURS	18

Sixth Quarter	
APPR 211 Litigation & Expert Testimony	3
APPR 260 Advanced Residential Applications	2
APPR 290 Appraisal Practicum I	1
APPR 291 Appraisal Seminar I	1
MATH 135 Elementary Statistics	5
REAL 275 Repair, Restore, Remodel	3
TOTAL CREDIT HOURS	15
TOTAL DEGREE CREDIT HOURS:	104

Architecture

Architecture Associate Degree Architecture Transfer Option 3D Visualization Certificate Facility Management Certificate

Architecture graduates assist architects and others in preparing plans and specifications. Many also work for builders and contractors, land developers, remodelers, facility and property managers, and with building product manufacturers and retailers. The Columbus job market for architecture graduates is remaining strong as Columbus continues to grow.

Columbus State's Associate Degree program in Architecture teaches manual and CAD drafting, product selection and specification, and code evaluation skills used daily in the occupation. Students in the program share common courses in materials, structures, blueprint reading and co-op work experiences with other programs in the Construction Sciences Department. This provides architecture students with a strong foundation of technical skills and a sense of the teamwork required in the construction industry.

The Architecture program provides students with a solid educational background in communication skills, math, computer literacy and operations, and humanities and behavioral sciences.

Upon completion of the Associate Degree in Architecture, the graduate will be able to:

- Use traditional manual drafting and drawing methods to express relevant ideas graphically. These include orthographic projection and one-point and two-point perspective generation.
- Use current CAD (Computer Aided Drafting) and 3D modeling software to prepare architectural drawings and other applicable graphics.
- Understand, interpret, organize, and generate architectural drawings.
- Understand and be familiar with the relationship and coordination implications between architectural and engineering drawings (site, structural, electrical, lighting, mechanical and plumbing).
- Research materials, consult with industry experts, and use CSI (Construction Specification Institute) standards relevant to the preparation of architectural drawings and specifications.
- Use applicable building and zoning codes relevant to the preparation of architectural drawings and specifications.
- Detail building structures utilizing wood, steel, and concrete manuals and handbooks.
- Understand and be familiar with project coordination, total project development, and professional practice.

Architecture Transfer Option

This plan of study should be considered in order to enhance a student's opportunity for transferring to a four-year institution with a major in architecture. This transfer option contains additional course requirements in mathematics and the physical sciences and fewer architecture courses than the basic Architecture program. The student interested in this track should consult with an academic advisor in the department at the start of the program.

3D Visualization Certificate

This post-associate certificate program will provide students with advanced coursework in 3D modeling, rendering and animation. Two separate tracks of study are available. One track concentrates upon the use of form*Z while the other track concentrates upon the use of Autodesk 3ds MAX. Each track is composed of five courses. The student may choose to pursue one track or the other or may choose to do both.

This certificate is geared towards professionals and students with prior experience in architecture, interior design, graphic design, or other related field.

Prerequisites for entering this certificate program: Having already received an associate degree or higher in a related field of study; having completed 50 or more credit hours within a related field of study; or receiving permission from a faculty member.

Facility Management Certificate

The need for skilled facility managers is expected to increase dramatically in the Columbus area and in the national scene.

The Facility Management Certificate comprises six basic courses which will enable a student to understand basic facility management functions and apply current management techniques and principles to facility management situations. The student will acquire an awareness of Facility Management as a profession and become equipped with many of the basic tools in order to enter it successfully.

These courses may be taken by themselves or combined with other courses as an Associate of Technical Studies degree (See "Designing Your Own Degree").

This certificate is not to be confused with the phrase "Certified Facility Manager" (CFM), as established by the International Facility Managers Association (IFMA), which carries with it an implication of extensive experience and testing.

Architecture Associate Degree

COURSE	CR
Quarter 1	
ARCH 110 Construction Drafting - Manual I	2
CIVL 120 Basic Construction Materials	3
CMGT 121 Building Construction Drawings	3
ENGL 101 Beginning Composition	3
MATH 104 Intermediate Algebra	5
TOTAL CREDIT HOURS	16

Quarter 2		
ARCH 111	Architectural Drafting – Manual II	4
ARCH 112	Construction Drafting – CAD I	2
ENGL 102	Essay & Research	3
MATH 148	College Algebra	5
TOTAL CREDIT HOURS		14

Quarter 3		
ARCH 100	Intro to the History of Architecture	5
ARCH 113	Architectural Drafting – CAD II	2
ARCH 155	Residential Construction / Wood Structures	3
ARCH 161	Presentation Drawings	3
MECH 130	Statics	3
TOTAL CREDIT HOURS		16

Quarter 4		
ARCH 214	Electricity (First Term)	2
ARCH 215	Lighting (Second Term)	2
MECH 242	Strength of Materials	3
SSCI XXX	Social Science 101, 102, or 104	5
COMM 105	Speech or COMM 110 Conference & Group Discussion	3
TOTAL CREDIT HOURS		15

Quarter 5		
ARCH 114	Architectural Drafting – CAD III	2
ARCH 221	Design Studio I	3
ARCH 232	Building Construction Standards	3
ARCH 250	Building Enclosure Materials	3
LAND 152	Site Planning	4
TOTAL CREDIT HOURS		15

Quarter 6		
ARCH 223	Design Studio II	3
ARCH 237	Structures – Steel, Concrete & Masonry	4
ENGL 204	Technical Writing	3
ENVR 282	Sustainable Building Strategies	3
TOTAL CREDIT HOURS		13

Quarter 7		
ARCH 266	Working Drawings	5
ARCH 270	Professional Practice and Management	3
XXX XXX	Technical Elective	3
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
TOTAL CREDIT HOURS		16
TOTAL DEGREE CREDIT HOURS		105

Technical Electives must be selected from the following list of courses:

ARCH 115	MicroStation CAD Drafting I	3
ARCH 291	Field Experience	3
ARCH 299	Special Topics in Architecture	1-5
CMGT 105	Construction Contract Documents	3
CMGT 282	Sustainable Construction	3
LAND 101	Landscape Principles	3
LAND 206	Landscape Graphics	4
ARCH 240	3D Modeling & Rendering – AutoCAD	3
ARCH 242	3D Visualization – form Z I	4
ARCH 282	Sustainable Design Strategies	3
ARCH 283	Sustainable Energy Performance	3

Architecture Transfer Option

COURSE	CR	
Quarter 1		
ARCH 110	Construction Drafting - Manual I	2
CIVL 120	Basic Construction Materials	3
CMGT 121	Building Construction Drawings	3
ENGL 101	Beginning Composition	3
MATH 151	Calculus and Analytical Geometry I	5
TOTAL CREDIT HOURS		16

Quarter 2		
ARCH 111	Architectural Drafting – Manual II	4
ARCH 112	Construction Drafting – CAD I	2
ENGL 102	Essay & Research	3
MATH 152	Calculus and Analytical Geometry II	5
TOTAL CREDIT HOURS		14

Quarter 3		
ARCH 100	Intro to the History of Architecture	5
ARCH 113	Architectural Drafting – CAD II	2
ARCH 155	Residential Construction / Wood Structures	3
ARCH 161	Presentation Drawings	3
MECH 130	Statics	3
TOTAL CREDIT HOURS		16

Quarter 4		
ARCH 214	Electricity (First Term)	2
ARCH 215	Lighting (Second Term)	2
MECH 242	Strength of Materials	3
SSCI XXX	Social Science 100, 101, 102, 104 or 105	5
COMM 105	Speech or COMM 110 Conference & Group Discussion	3
TOTAL CREDIT HOURS		15

Quarter 5		
ARCH 114	Architectural Drafting – CAD III	2
ARCH 221	Design Studio I	3
ARCH 232	Building Construction Standards	3
ARCH 250	Building Enclosure Materials	3
LAND 152	Site Planning	4
TOTAL CREDIT HOURS		15

Quarter 6		
ARCH 223	Design Studio II	3
ARCH 237	Structures – Steel, Concrete & Masonry	4
ENGL 204	Technical Writing	3
ENVR 282	Sustainable Building Strategies	3
PHYS 117	College Physics (Mechanical and Heat)	5
TOTAL CREDIT HOURS		18

Quarter 7		
PHYS 118	College Physics	5
ARCH 270	Professional Practice and Management	3
XXX XXX	Technical Elective	3
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
TOTAL CREDIT HOURS		16
TOTAL DEGREE CREDIT HOURS		110

Technical Electives must be selected from the following list of courses:

ARCH 291	Field Experience	3
ARCH 299	Special Topics in Architecture	1-5
ARCH 115	MicroStation CAD Drafting I	3
CMGT 105	Construction Contract Documents	3
CMGT 282	Sustainable Construction	3
LAND 101	Landscape Principles	3
LAND 206	Landscape Graphics	4
ARCH 240	3D Modeling & Rendering - AutoCAD	3
ARCH 242	3D Visualization – formZ I	4
ARCH 282	Sustainable Design Strategies	3
ARCH 283	Sustainable Energy Performance	3

3D Visualization Certificate

COURSE	CR
Quarter 1	
form Z	
ARCH 242 3D Visualization – form Z I.....	4
or	
Autodesk 3ds MAX	
ARCH 246 3D Visualization – 3ds MAX I.....	4
TOTAL CREDIT HOURS	4
Quarter 2	
form Z	
ARCH 243 3D Visualization – form Z II.....	4
ARCH 252 Post Production (second term).....	3
or	
Autodesk 3ds MAX	
ARCH 247 3D Visualization – 3ds MAX II.....	4
ARCH 252 Post Production (second term).....	3
TOTAL CREDIT HOURS	7
TOTAL CERTIFICATE CREDIT HOURS	11

Facility Management Certificate

COURSE	CR
Quarter 1	
FAC 111 Introduction to Facility Management.....	3
CMGT 121 Building Construction Drawings.....	3
TOTAL CREDIT HOURS	6
Quarter 2	
FAC 150 Operations & Maintenance.....	3
XXX XXX Technical Elective	3
TOTAL CREDIT HOURS	6
Quarter 3	
FAC 240 Voice and Data Systems.....	3
ARCH 270 Professional Practice and Management.....	3
TOTAL CREDIT HOURS	6
TOTAL CERTIFICATE CREDIT HOURS	18

Technical Electives must be selected from the following list of courses:

HAC 141 Principles of Refrigeration.....	4
CMGT 115 Building Construction Methods.....	3
HRM 121 Human Resources Management	4
ARCH 232 Building Construction Standards.....	3
FAC 250 Computers in Facility Management.....	2
FAC 260 Problems in Facility Management.....	4

Automotive Technology

Automotive Technology Associate Degree Automotive Service Management Major Ford ASSET Program Maintenance & Light Repair Certificate Vocational Education Transfer Option with Ohio State University College of Education YAATC

Graduates of the Associate Degree program in Automotive Technology are qualified for entry-level positions as automotive service technicians, service writers, and entry-level managers. Many persons already employed in the field use the program to progress to advanced technical or management positions, and to prepare for Automotive Service Excellence (ASE) certification examinations.

Automotive Technology Associate Degree

The Automotive Technology program prepares students for successful careers as service technicians in the rapidly growing automotive repair industry. By providing students with exposure and hands-on experience on a variety of domestic and import vehicles, this broad-based curriculum prepares graduates for a wide range of job opportunities in a new car dealerships, independent repair shops, or fleet repair facilities.

The Automotive Technology program at Columbus State offers courses designed for a variety of individuals ranging from the beginner to those with advanced skills and years of experience. Students may earn an associate degree, obtain ASE certification, or take individual courses to meet their educational goals. The associate degree program in Automotive Technology provides instruction in all aspects of the automobile, including the latest electronic systems. Students master the skills needed to diagnose and repair automobiles while working in the College's well-equipped auto lab. The experienced faculty work closely with students to prepare them for a career and to become certified A.S.E. (National Institute for Automotive Service Excellence) Master Automotive Technicians.

Columbus State's automotive program was the nation's first college automotive program master certified by A.S.E. To receive this certification, the program is evaluated against industry standards of quality every five years by a team of external evaluators. The certification process ensures that the curriculum includes all of the appropriate competencies needed to properly prepare entry-level technicians and is delivered by A.S.E. certified faculty, on current technology equipment and vehicles. All of the automotive faculty are A.S.E. Master Certified technicians with extensive industry repair experience. The program was recently reevaluated and granted accreditation until 2009.

Upon completion of the Associate Degree in Automotive Technology, the graduate will be able to:

- Solve automotive problems in a systematic, logical, and efficient manner.
- Diagnose and repair driveability problems on early and current

car models, including those with fuel injection and computerized engine controls.

- Diagnose and repair simple and complex electrical problems.
- Diagnose and repair engine mechanical problems.
- Diagnose and repair automatic transmissions and transaxles, including total rebuilding of units.
- Diagnose and repair manual transmissions and transaxles, as well as other driveline components such as driveshafts, drive axles, and differentials.
- Precisely measure engine and other automotive parts, using the appropriate measuring instruments.
- Diagnose brake system problems and perform a complete brake service (including necessary machining).
- Diagnose and repair steering and suspension problems and properly align the suspension of all types of automobiles and light trucks, using either two-or four-wheel alignment machines.
- Diagnose and repair automotive air-conditioning systems.
- Demonstrate an understanding of the principles and operation of new technologies as they become incorporated into automobile designs.
- Make repair estimates and complete the necessary paperwork for customer service and warranty repairs.
- Apply basic business practices, including cultivation of good customer and employee relations.

TechLINK: Cooperative Work Experience

The Automotive Technology Department firmly believes that the best way to learn to become a highly skilled automotive technician is through a combination of on-campus learning and real-life work. Columbus State works closely with students to help those interested in finding paid cooperative work experience placements in local shops. Students who are actively working in cooperative work placements in area dealerships and independent repair shops follow the same curriculum as the general Automotive Technology Program. However, since students are working in dealerships as well as taking coursework on campus, the scheduling of courses is arranged to coordinate with the students' work schedule. Contact Bill Warner (614) 287-2675, the department cooperative work experience advisor, for further information on cooperative placement opportunities.

In addition to meeting all of the objectives of the general Automotive Technology program, participation in cooperative education is designed to:

- Fill the local shortage of qualified, entry-level technicians needed by area automotive repair shops.
- Provide participating students with paid industry work experience to enhance the learning experience and to enable them to successfully transition from the classroom to the workplace.
- Provide a course of study that will enable successful graduates to have the knowledge and skills necessary to develop an upward career path in automotive repair.

Automotive Technology Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
MATH 101 Business Mathematics.....	5
AUTO 061 Basic Automotive Systems & Theories of Operation	4
AUTO 062 Auto Shop Orientation & Service.....	4
CIT 101 PC Applications 1	3
TOTAL CREDIT HOURS	19

Quarter 2	
AUTO150 Brake Systems Theory & Operation	4
AUTO160 Electrical Systems Theory & Operation	4
ENGL 102 Essay & Research	3
HUM XXX Humanities 111, 112, 113, 151, or 224	5
BMGT XXX Business Management Elective	3-5
TOTAL CREDIT HOURS	19

Quarter 3	
AUTO170 Heating/Air Conditioning Systems Theory & Operation	4
AUTO120 Automatic Transmission Operation & Overhaul	4
AUTO125 Automatic Transmission Diagnosis & In-Car Repair	3
AUTO165 Electrical/Electronic Diagnosis & Repair.....	3
Science Elective: NSCI101 or PHYS100	4-5
TOTAL CREDIT HOURS	18

Quarter 4	
AUTO110 Engine Operation & Overhaul	4
AUTO115 Engine Diagnosis & In-Car Repair	3
AUTO140 Steering and Suspension Theory & Operation.....	4
SSCI XXX Social Science 101, 102, 104, or 105.....	5
AUTO175 Heating/Air Conditioning Systems Diagnosis & Repair	3
TOTAL CREDIT HOURS	19

Quarter 5	
AUTO130 Manual Transmissions/Drivelines Operation & Overhaul	4
AUTO135 Manual Transmissions Diagnosis & In-Car Repair	3
AUTO180 Engine Performance Theory & Operation	4
ENGL204 Technical Writing.....	3
AUTO155 Brake Systems Diagnosis & Repair.....	3
TOTAL CREDIT HOURS	17

Quarter 6	
AUTO185 Computerized Engine Performance	4
COMM105 Speech.....	3
AUTO145 Steering & Suspension Diagnosis & Repair	3
Technical Elective.....	2
AUTO300 Shop Experience	4
TOTAL CREDIT HOURS	16
TOTAL DEGREE CREDIT HOURS	107

TECHNICAL ELECTIVES

AUTO 210 Current Trends in Engine Repair	2
AUTO 220 Current Trends in Automatic Trans.....	2
AUTO 230 Current Trends in Manual Trans.	2
AUTO 240 Current Trends in Susp. Stg.	2
AUTO 250 Current Trends in Brake Systems	2
AUTO 260 Current Trends in Electrical Systems	2
AUTO 270 Current Trends in Heating & A/C	2
AUTO 280 Current Trends in Engine Performance.....	2
AUTO181 Fundamentals of Alternative Fuels	3
AUTO 186 Advanced Alternative Fuel Systems	2
AUTO 190 Automotive Bus. Mgmt.	3
AUTO 191 Service Advising	3
AUTO 192 Auto. Service Management.....	3
AUTO 245 Steering, Suspension & Brakes Diagnosis & Evaluation	3
AUTO 265 Electrical Diagnosis & Evaluation.....	3

Automotive Service Management Major:

Service Management major prepares students for entry into management positions available in automotive repair facilities. Potential job titles for graduates include service director, service manager, service advisor, dispatcher, customer relations specialist, or independent shop owner. The Service Management major shares general education courses and the first year of basic technical courses within the Automotive Technology program. Then, during the second year of the program, it supplements technical knowledge with the fundamental management principles and practices students need to know to be successful in a management career.

Upon completion of the program, students earn an Associate Degree of Applied Science in Automotive Technology. The program is designed to:

- Provide students with fundamental knowledge of the theory and operation of all automotive systems.
- Provide students with a broad-based background in general business management principles and practices.
- Provide students with knowledge of a wide range of current automotive-specific management practices and principles.
- Prepare students for entry-level management-track positions in the automotive repair industry.

Automotive Service Management Major

COURSE	CR
Quarter 1	
AUTO 061 Basic Automotive Systems & Theories of Operation	4
AUTO 062 Auto Shop Orientation & Service	4
MATH 101 Business Math	5
ENGL 101 Beginning Composition	3
CIT 101 PC Applications 1	3
TOTAL CREDIT HOURS	19
Quarter 2	
AUTO 110 Engine Operation & Overhaul	4
AUTO 150 Brake Systems Theory & Operation	4
AUTO 160 Electrical Systems Theory & Operation	4
BMGT 101 Introduction to Business	5
TOTAL CREDIT HOURS	17
Quarter 3	
AUTO 170 Heating/AC Systems Theory & Operation	4
AUTO 120 Automatic Transmissions Operation & Overhaul	4
AUTO 180 Engine Performance Theory & Operation	4
BMGT 111 Management	5
ENGL 102 Essay & Research	3
TOTAL CREDIT HOURS	20
Quarter 4	
AUTO 140 Steering and Suspension Theory & Operation	4
AUTO 130 Manual Transmissions/Drivelines Operation & Overhaul	4
ENGL 200 Business Communications	3
AUTO 190 Automotive Business Mgmt.	3
AUTO 191 Service Advising	3
TOTAL CREDIT HOURS	17
Quarter 5	
HUM XXX Humanities 111, 112, 113, 151, 152, or 224	5
COMM 105 Speech	3
AUTO 192 Auto. Service Mgmt.	3
NSCI 101 Natural Science I or	
PHYS 100 Physics	5
AUTO 193 Auto. Service Merchandising	3
TOTAL CREDIT HOURS	19

Quarter 6	
SSCI XXX Social Science 101, 102, 104, or 105	5
QUAL 240 Total Quality Management	3
AUTO 197 Auto. Parts Management	3
XXX XXX Technical Elective	2
XXX XXX Technical Elective	2
TOTAL CREDIT HOURS	15
TOTAL DEGREE CREDIT HOURS	107

TECHNICAL ELECTIVES

BMGT 216 Business Ethics	3
AUTO 195 Auto. Parts Inventory Control	2
AUTO 196 Auto. Parts Sales	2
AUTO 101 Autocare	3

Ford ASSET

ASSET is a partnership between Ford Motor Company, Ford-Lincoln-Mercury dealers, and Columbus State Community College. The program provides students the opportunity to become highly trained technicians employed by Ford, Lincoln and Mercury dealerships. The program:

- trains students to diagnose, service, and maintain Ford automotive products using Ford recommended procedures, special tools, and service publications.
- Ensures that ASSET-trained technicians can easily become familiar with new systems and components as they are introduced.
- Provides paid work experience during the program to reinforce what is being taught in the classroom.
- Allows ASSET-trained students to earn an Associate's Degree in Automotive Technology, ASE Certifications, and most importantly, Ford Certifications.

ASSET is an Associate Degree program divided into two parts. The Maintenance and Light Repair program is completed first. Then, Ford specific instruction begins with 11 weeks of classroom/lab instruction alternated with 11 weeks of paid co-op work experience at a sponsoring Ford, Lincoln, or Mercury dealership for the remaining 18 months. For more information, contact our ASSET Coordinator at (614) 287-5408.

Ford ASSET Program

COURSE	CR
Quarter 1	
CIT 101 PC Applications 1	3
ENGL 101 Beginning Composition	3
AUTO160 Electrical Systems Theory & Operation	4
AUTO150 Brake Systems Theory & Operation	4
TOTAL CREDIT HOURS	14
Quarter 2	
AUTO140 Steering & Suspension Theory & Operation	4
AUTO170 Heating & A/C Systems Theory & Operation	4
ENGL102 Essay & Research	3
Social Science Elective – SSCI 101, 102, 104 or 105	5
TOTAL CREDIT HOURS	16
Quarter 3	
FORD100 Introduction to Ford Technology	4
FORD103 Manual Transmissions / Drivelines	4
FORD101 Basic Engines	4
FORD114 Steering and Suspension Diagnosis	2
ENGL200 Business Communication	3
TOTAL CREDIT HOURS	17

Quarter 4	
FORD201	Cooperative Experience.....4
FORD211	Automotive Seminar.....1
COMM105	Speech.....3
MATH101	Business Math.....5
TOTAL CREDIT HOURS	.....13

Quarter 5	
FORD 116	Auto Electronics/Engine Controls.....4
FORD 165	Antilock Brake Systems.....2
FORD 164	Electronic Steering & Suspension Systems.....2
FORD108	Engine Performance.....5
Humanities Elective – HUM111,112,113,151, 152 or 224	.....5
TOTAL CREDIT HOURS	.....18

Quarter 6	
FORD270	Advanced Climate Control Diagnosis.....2
FORD202	Cooperative Experience.....4
FORD212	Automotive Seminar.....1
TOTAL CREDIT HOURS	.....8

Quarter 7	
Science Elective NSCI101 or PHYS100	.....5
FORD 102	Automatic Transmissions.....5
FORD 111	Engine Repair.....2
FORD 126	Advanced Electronic Engine Controls.....4
TOTAL CREDIT HOURS	.....16

Quarter 8	
Business Elective BMGT101, BMGT231 or FMGT101	.....4
FORD 203	Cooperative Experience.....4
FORD 213	Automotive Seminar.....1
TOTAL CREDIT HOURS	.....9
TOTAL DEGREE CREDIT HOURS	.....110

Maintenance & Light Repair Certificate Program

Students whose needs demand a short-term career track program can choose the Light Maintenance and Repair Certificate program. This six-month program prepares students with the knowledge and skills necessary to enter the automotive repair industry quickly.

Upon completion of this program, graduates are employable at local auto repair companies performing automotive maintenance services. Since this program is part of the Automotive Technology program, students can re-enter the college degree program at a later date to expand their knowledge and skills and work toward A.S.E. Master Technician certification.

COURSE	CR
Quarter 1	
AUTO061	Basic Automotive Systems & Theories of Operation.....4
AUTO062	Auto Shop Orientation & Service.....4
Quarter 2	
AUTO150	Brake Systems Theory & Operation.....4
AUTO160	Electrical Systems Theory & Operation.....4
Quarter 3	
AUTO140	Suspension & Steering Theory & Operation.....4
AUTO170	Heating and A/C Systems Theory & Operation.....4
Total Credit Hours	.....24
Optional (Ford Certifications):	
FORD 240	Steering & Brakes Diagnosis.....3
FORD 260	Electrical System Diagnosis.....3

YAATC

The Youth and Adult Automotive Training Center (YAATC) is designed for disadvantaged, at-risk people who have a desire to gain technical knowledge in automotive repair as well as increase self-sufficiency. This program will allow students to build a new perspective on life and their careers. YAATC will prepare each dedicated student to graduate with the technical knowledge to perform automotive maintenance and light repairs and have the opportunity to begin an extremely rewarding career in the automotive industry. YAATC also helps create a more diverse workforce in the automotive industry and helps fill the void of qualified automotive technicians. It will provide students with basic skills training, case management services, community agency referrals, job readiness instruction, intensive automotive technical instruction, co-op experiences, and permanent job placements in the automotive repair industry. For more information, contact (614) 287-5504.

Vocational Education Transfer Option with Ohio State University College of Education

The Automotive Technology program at Columbus State has completed an articulation agreement with the Technical Education and Training Program of the Ohio State University College of Education. This agreement allows Automotive students to complete their associate degree at Columbus State, transfer their credits to Ohio State, and complete a baccalaureate degree in Technical Education Training. Students completing the Ohio State program are eligible for certification by the Ohio Department of Education to teach in related high school vocational programs throughout the State of Ohio. Interested students should contact their Columbus State department chairperson for curriculum requirements and additional details. Please note that course requirements for this transfer option may differ from the standard plan of study published in the catalog.

Aviation Maintenance Technology

Aviation Maintenance Technology Associate Degree Aviation Maintenance Technician Certificate

Aviation Maintenance Technicians (AMT) are a vital component of the fast paced and exciting aviation industry. Aerospace industry growth creates a continual demand for newly trained AMTs, and interesting job locations abound. The Aviation Maintenance Technician has many career opportunities within the aviation industry as well as in nonaviation industries due to the skills of the AMT.

Students in the Aviation Maintenance Technology program may pursue technical training for the Airframe and Powerplant Certificate or the Associate Degree of Applied Science. The Airframe & Powerplant Certificate program covers the structural, electrical, hydraulic, environmental, and powerplant systems of many types of aircraft. Students who complete the certificate program may take additional course work in English, mathematics, physics, and other electives to receive an Associate Degree in Applied Science. The certificate and Associate Degree can be completed in eight quarters.

The Aviation Maintenance facility is located at the Columbus State Southwest Center at Bolton Field Airport (KTZR), southwest of Columbus. The 10,000 square foot hangar houses the College's fleet of single-and multi-engine, reciprocating, and jet engine aircraft and helicopter. Well-equipped classrooms and laboratories provide students with hands-on experience in an airport environment.

The Aviation Maintenance Technology program is approved by the Federal Aviation Administration (FAA Certificate No. DL9T090R) and meets the requirements of FAA Regulation Part 147. Students successfully completing the appropriate technical studies are qualified to take the exams for the FAA Airframe and Powerplant certificate rating.

Upon completion of the Aviation Maintenance Technology curriculum, the graduate will be able to:

- Service, inspect, and complete repairs and alterations on airframes, engines, propellers, and associated systems (including environmental, electrical, fuel, hydraulic, and pneumatic systems).
- Utilize the regulations and technical manuals to safely complete inspections, repairs and alterations of aircraft, and complete the required maintenance entries after completion.
- Properly use precision measuring equipment for the accuracy demanded by the aviation industry.
- Understand blueprints used for the repair and alteration of aircraft and utilize them to affect the repair or alteration.
- Identify aircraft materials and hardware and their structural properties. Correctly identify corrosion and the proper treatment and prevention methods and techniques.
- Identify and use nondestructive testing methods used in the Aviation Industry.
- Meet FAA certification requirements for the Airframe and Powerplant Certificates.

Aviation Maintenance Technology Associate Degree

COURSE	CR
Quarter 1	
AMT 101 Introduction to Aviation.....	4
AMT 110 AMT Regulations, Privileges & Documentation.....	4
AMT 115 Aircraft DC Electricity.....	5
MECH 120 Mechanical Drafting 1.....	3
ENGL 101 Beginning Composition.....	3
TOTAL CREDIT HOURS.....	19
Quarter 2	
AMT 130 Aircraft Ground Handling & Safety.....	2
AMT 140 Aircraft Tools, Hardware & Materials.....	5
AMT 145 Aircraft AC Electricity.....	5
AMT 150 Basic Aircraft Inspection Systems.....	2
ENGL 102 Essay and Research.....	3
MATH 103 Beginning Algebra II.....	4
TOTAL CREDIT HOURS.....	21
Quarter 3	
AMT 160 Aircraft Reciprocating Engine Maintenance 1.....	4
AMT 162 Aircraft Reciprocating Engine Maintenance 2.....	5
AMT 165 Aircraft Propellers.....	3
AMT 175 Aircraft Electrical Systems 1.....	3
MATH 111 Technical Math I.....	4
TOTAL CREDIT HOURS.....	19
Quarter 4	
AMT 180 Aircraft Turbine Engine Maintenance 1.....	5
AMT 182 Aircraft Turbine Engine Maintenance 2.....	5
AMT 190 Aircraft Ice/Rain Protection Systems.....	2
AMT 195 Aircraft Electrical Systems 2.....	4
PHYS 181 Technical Physics (Mechanics).....	4
TOTAL CREDIT HOURS.....	20
Quarter 5	
AMT 210 Aircraft Sheet Metal Structures.....	5
AMT 212 Aircraft Wood, Dope & Fabric.....	3
AMT 215 Aircraft Environmental Controls.....	3
AMT 220 Aircraft Fuel Systems.....	3
MECH 250 Materials Science.....	3
ENGL 204 Technical Writing.....	3
TOTAL CREDIT HOURS.....	20
Quarter 6	
AMT 235 Aircraft Instrumentation.....	4
AMT 240 Aircraft Composite Structures.....	3
AMT 245 Aircraft Landing Gear & Fluid Power Systems.....	6
AMT 250 Advanced NDI for Aircraft.....	3
SSCI XXX Social Science 100, 101, 102, 104, or 105.....	5
TOTAL CREDIT HOURS.....	21
Quarter 7	
AMT 255 Aircraft Navigation & Communication Systems.....	4
AMT 260 Aircraft Rigging & Assembly.....	3
AMT 262 Fundamentals of Helicopter Maintenance.....	3
AMT 270 Aircraft Conformity Inspections.....	5
Basic Related Elective – BMGT 101, ENVR 101, or EET 132.....	3-5
COMM 105 Speech.....	3
TOTAL CREDIT HOURS.....	21-23
Quarter 8	
AMT 280 Advanced Aircraft Maintenance Practices.....	6
AMT 285 Aircraft Weight & Balance.....	3
AMT 290 Human Factors in Aviation Maintenance.....	4
AMT 295 Aircraft Systems Review.....	3
HUM XXX Humanities 111, 112, 113, 151, 152, or 224.....	5
TOTAL CREDIT HOURS.....	21
TOTAL DEGREE CREDIT HOURS.....	162-164

Aviation Maintenance Technician Certificate

COURSE	CR
Quarter 1	
AMT 101 Introduction to Aviation.....	4
AMT 110 AMT Regulations, Privileges & Documentation.....	4
AMT 115 Aircraft DC Electricity.....	5
MECH 120 Mechanical Drafting 1.....	3
TOTAL CREDIT HOURS.....	16
Quarter 2	
AMT 130 Aircraft Ground Handling & Safety.....	2
AMT 140 Aircraft Tools, Hardware & Materials.....	5
AMT 145 Aircraft AC Electricity.....	5
AMT 150 Basic Aircraft Inspection Systems.....	2
TOTAL CREDIT HOURS.....	14
Quarter 3	
AMT 160 Aircraft Reciprocating Engine Maintenance 1.....	4
AMT 162 Aircraft Reciprocating Engine Maintenance 2.....	5
AMT 165 Aircraft Propellers.....	3
AMT 175 Aircraft Electrical Systems 1.....	3
TOTAL CREDIT HOURS.....	15
Quarter 4	
AMT 180 Aircraft Turbine Engine Maintenance 1.....	5
AMT 182 Aircraft Turbine Engine Maintenance 2.....	5
AMT 190 Aircraft Ice/Rain Protection Systems.....	2
AMT 195 Aircraft Electrical Systems 2.....	4
TOTAL CREDIT HOURS.....	16
Quarter 5	
AMT 210 Aircraft Sheet Metal Structures.....	5
AMT 212 Aircraft Wood, Dope & Fabric.....	3
AMT 215 Aircraft Environmental Controls.....	3
AMT 220 Aircraft Fuel Systems.....	3
TOTAL CREDIT HOURS.....	14
Quarter 6	
AMT 235 Aircraft Instrumentation.....	4
AMT 240 Aircraft Composite Structures.....	3
AMT 245 Aircraft Landing Gear & Fluid Power Systems.....	6
AMT 250 Advanced NDI for Aircraft.....	3
TOTAL CREDIT HOURS.....	16
Quarter 7	
AMT 255 Aircraft Navigation & Communication Systems.....	4
AMT 260 Aircraft Rigging & Assembly.....	3
AMT 262 Fundamentals of Helicopter Maintenance.....	3
AMT 270 Aircraft Conformity Inspections.....	5
TOTAL CREDIT HOURS.....	15
Quarter 8	
AMT 280 Advanced Maintenance Practices.....	6
AMT 285 Aircraft Weight & Balance.....	3
AMT 290 Human Factors in Aviation Maintenance.....	4
AMT 295 Aircraft Systems Review.....	3
TOTAL CREDIT HOURS.....	16
TOTAL CERTIFICATE CREDIT HOURS.....	122

Business Management

Business Management Associate Degree
Business Management Major
Small Business Management Major
Leadership Development Certificate
Managing Interpersonal Skills Certificate
Nonprofit Management Certificate
Pre MBA Certificate
Training and Development Certificate
Vocational Education Transfer Option with
The Ohio State University College of Education

In order to compete effectively in the 21st century, successful managers and entrepreneurs will need a complex set of interpersonal, communication, analytical, and decision-making skills. Columbus State's Business Management curriculum focuses on meeting these requirements for students who wish to attain a two-year degree in business management or who wish to upgrade current job performance skills. The emphasis in the program is on skill applications through the latest teaching techniques and technologies available. Included in the program are opportunities for the student to elect to take a hands-on internship experience with a local company or government agency, or to pursue independent research projects. The entire degree program is also available to students via distance learning.

To meet the demands of students desiring to own or operate a small business, the program includes a Small Business Management major described below.

The Business Management Leadership Development Certificate has been designed to teach an awareness of current trends in leadership and to develop the skills necessary for leaders to face today's organizational challenges. Students will learn to identify and acquire fundamental skill sets that serve to strengthen their leadership potential, including conflict resolution, communication skills, creative thinking, and managing diversity.

The Managing Interpersonal Skills Certificate program is designed to provide students with the knowledge and skills necessary to develop and maintain effective interpersonal relationships, both professionally and personally. Since more than two-thirds of the competencies desired of the average employee are interpersonal rather than technical in nature, this set of knowledge and skills is essential for effective job performance. This sequence of innovative, highly interactive courses provides students with the opportunity to learn about themselves as well as others. This is a four-course certificate program available to degree as well as nondegree-seeking students interested in improving their interpersonal skills.

Business Management is also offering a certificate program in Nonprofit Management. The four-course sequence is designed to prepare individuals for leadership roles in a variety of nonprofit organizations, including those in the fields of adult human service, health care, cultural arts, the environment, youth service, faith-based, and professional/trade. The program is dynamic, interactive, and practical and yields insights and skills immediately applicable to the workplace. The curriculum was validated by professionals in the field and is taught by faculty with significant practical nonprofit experience as well as academic preparation.

Business Management's newest certificate program is the Pre-MBA Certificate. The MBA (Master of Business Administration) is one of the most sought-after professional degrees not only by those currently working in business but also by many other professionals (such as physicians, attorneys, public-sector managers, and entrepreneurs) who are increasingly

in need of these types of skills. The Pre-MBA Certificate is designed for individuals who have already completed a baccalaureate degree and wish to pursue an MBA, or for professionals in various fields who wish a basic grounding in business principles through an introduction to the basic business disciplines. All of the courses in this certificate can be complete online. For more information, access the Pre-MBA Web site at <http://www.csc.edu/premba>.

Business Management also offers a Training and Development Certificate intended to provide a unique opportunity to build training and development skills. Professionals in all areas, and especially managers who train, can benefit from skills and knowledge gained in these courses. This is a three-course certificate program available to degree as well as nondegree-seeking students interested in improving training and development skills.

Columbus State Community College's Business Management program is nationally accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Vocational Education Transfer Option with Ohio State University College of Education

The Business Management program at Columbus State has completed an articulation agreement with the Technical Education and Training Program of the Ohio State University College of Education. This agreement allows Business Management students to complete their associate degree at Columbus State, transfer their credits to Ohio State, and complete a baccalaureate degree in Technical Education and Training. Students completing the Ohio State program may be eligible for certification by the Ohio Department of Education to teach in related high school career and technical education programs throughout the State of Ohio. Interested students should contact their assigned faculty advisor for curriculum requirements and additional details. Please note that course requirements for this transfer option may differ from the standard plan of study published in the catalog.

Traditional Classes and Distance Learning Choices at Columbus State

The Business Management program is proud to offer traditional and distance learning options for our students. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at the main campus and off-campus locations. The Business Management program also offers distance learning courses that provide the same high quality learning as traditional instruction, yet with the added flexibility of being able to complete course work online or through video-based instruction.

Business Management Major

Upon completion of the program for an Associate Degree in Business Management with a Business Management major, the graduate will be able to:

- Demonstrate knowledge of the management functions and skills within an organizational system as they interact in a dynamic and diverse global environment.
- Demonstrate a working knowledge of current legal, ethical, social, financial, and economic environmental factors as they apply to business.
- Prepare and present effective written and oral business-related reports.
- Work effectively as a member of a team.
- Use appropriate technology and other resources to research, analyze, and integrate both quantitative and qualitative data to solve business problems.
- Appropriately apply the management functions both departmentally

and to the organization as a whole.

In addition to the Business Management core outcomes, a graduate pursuing the Business Management degree on-campus will be able to:

- Assess and develop individual communication, leadership, and team building styles.
- Recognize and adapt to the communication, leadership, and team building styles of others.

Business Management Major

COURSE	CR
Quarter 1	
OADM 101 Business Grammar Review	3
MATH 103 Beginning Algebra II.....	4
CIT 101* PC Applications 1	3
BMGT 101 Principles of Business	5
BMGT 102 Managing Interpersonal Skills I.....	3
TOTAL CREDIT HOURS	18

Quarter 2	
BMGT 111 Management.....	5
PSY 100 Introduction to Psychology	5
ENGL 101 Beginning Composition	3
XXX XXX Business Elective	3
TOTAL CREDIT HOURS	16

Quarter 3	
ENGL 102 Essay & Research	3
BMGT 211 Organizational Behavior	4
COMM 110 Conference & Group Discussion or	
COMM 105 Speech.....	3
LEGL 264 Legal Environment of Business.....	4
ECON 200 Principles of Microeconomics	5
TOTAL CREDIT HOURS	19

Quarter 4	
ENGL 200 Business Communication.....	3
BMGT 220 Leadership Fundamentals	3
HRM 121 Human Resource Management	4
ACCT 106 Introduction to Accounting I.....	5
MKTG 111 Marketing Principles.....	5
TOTAL CREDIT HOURS	20

Quarter 5	
ACCT 107 Introduction to Accounting II.....	5
HRM 220 Labor Relations or	
BMGT 253 The Art and Science of Conflict Resolution.....	5
FMGT 201 Business Finance	5
HUM XXX Humanities 111,112,113,151,152, or 224	5
TOTAL CREDIT HOURS.....	20

Quarter 6	
NSCI 101 Natural Science	5
BMGT 271 Management Decisions.....	2
BMGT 272 Case Studies in Business Seminar	3
BMGT 216 Business Ethics	3
XXX XXX Technical Elective.....	3
TOTAL CREDIT HOURS	16
TOTAL DEGREE CREDIT HOURS	109

*Computing Skills Requirement:

Business Management students will be expected to have mastered MS Word, PowerPoint, and Access software applications. Those students who are not proficient in any of the foregoing applications should enroll in CPT 101, PC Applications I.

Students who have proficiency in one or more of the foregoing applications should choose from the following courses to complete the three-credit Computer Skills Requirement:

CIT 101	PC Applications I.....	3
CIT 093	Project Management.....	1
OADM 113	QuickBooks.....	1
OADM 186	Intro To Word.....	1
OADM 187	Intro to Excel.....	1
OADM 188	Intro to PowerPoint.....	1
OADM 189	Intro to Access.....	1

Technical Electives:

In the courses listed below, BMGT prefix courses are approved for "business elective" requirements; all courses are approved for "technical elective" requirements:

BMGT 103	Interpersonal Skills II.....	3
BMGT 104	Stress Management.....	1
BMGT 105	Time Management.....	1
BMGT 106	Budgeting.....	1
BMGT 201	Creative Problem Solving.....	3
BMGT 202	Facilitating Organizational Processes.....	3
BMGT 204	Management in the Political Environment.....	4
BMGT 208	Organization Communication.....	3
BMGT 218**	Management Training for Supervisors.....	5
BMGT 219**	International Business.....	3
BMGT 229	International Management.....	4
BMGT 230	Organizational Development & Change.....	5
BMGT 231**	Small Business Development.....	4
BMGT 232**	Small Business Operations.....	4
BMGT 237	Home Based Business.....	5
BMGT 245	Introduction to Non-Profit Management.....	5
BMGT 246	Operational Management of Non-Organizations.....	5
BMGT 247	Legal and Financial Issues In Non-Profit Management.....	5
BMGT 248	Leadership Seminar In Non-Profit Management.....	5
BMGT 253**	The Art and Science of Conflict Resolution.....	4
BMGT 258	Planning and Process Improvement Tools.....	3
BMGT 261	Business Mgmt Practicum I.....	4
BMGT 262	Special Problems in Business Management I.....	2
BMGT 263	Business Mgmt Practicum II.....	4
BMGT 262	Special Problems in Business Management II.....	4
BMGT 273	Management Service Project.....	3
BMGT 276	Assessment, Analysis, & Evaluation Skills.....	4
BMGT 277	Instructional Design & Development Skills.....	4
BMGT 278	Training Delivery Skills.....	4
BMGT 280	Business Etiquette.....	3
BMGT 281-285**	Studies in Contemporary Business.....	1-5
HRM 124	Personnel Interviewing.....	4
MATH 135	Elementary Statistics (Math 103 prerequisite).....	5
CIT 102	PC Applications II.....	3
CIT 137	Advanced Information Presentation.....	3
MKTG 122	Business and the Internet.....	3
MKTG 266	Customer Service.....	3
OADM 172**	Microsoft Excel.....	3
OADM 188**	PowerPoint.....	1

**Also offered in distance learning/independent studies modes.

Small Business Management Major

In addition to the Business Management core outcomes, a graduate pursuing the Small Business Management degree will be able to:

- Demonstrate knowledge of the skills needed to start a new business.
- Demonstrate knowledge of the research methods and skills needed to start, expand, or purchase a business.
- List and explain the major factors influencing the success or failure of a small business.
- Develop a business plan.
- Demonstrate knowledge of the functional and interpersonal management skills needed to operate a small business.

Small Business Management Major

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition.....	3
MATH 103	Beginning Algebra II.....	4
CIT 101*	PC Applications I.....	3
BMGT 101	Principles of Business.....	5
BMGT 102	Managing Interpersonal Skills.....	3
TOTAL CREDIT HOURS		19

Quarter 2		
ENGL 102	Essay & Research.....	3
ECON 100	Introduction to Economics.....	5
BMGT 111	Management.....	5
MKTG 111	Marketing.....	5
TOTAL CREDIT HOURS		18

Quarter 3		
ENGL 200	Business Communications.....	3
PSY 100	Introduction to Psychology.....	5
LEGL 264	Legal Environment of Business.....	4
ACCT106	Introduction to Accounting I.....	5
TOTAL CREDIT HOURS		17

Quarter 4		
COMM 105	Speech.....	3
ACCT107	Introduction to Accounting II.....	5
HRM 121	Human Resources Management.....	4
BMGT 231	Small Business Development.....	4
NSCI 101	Natural Science.....	5
TOTAL CREDIT HOURS		21

Quarter 5		
HUM XXX	Humanities 111,112,113,151, 152 or 224.....	5
BMGT 232	Small Business Operations.....	4
MKTG 226	Customer Service Principles.....	3
FMGT 201	Business Finance.....	5
XXX XXX	Technical Elective.....	3
TOTAL CREDIT HOURS		20

Quarter 6		
BMGT 234	Cases in Small Business.....	4
BMGT 238	Small Business Management Practicum.....	4
BMGT 239	Small Business Management Practicum Seminar.....	2
BMGT 235	Strategic Business Planning.....	5
TOTAL CREDIT HOURS		15
TOTAL DEGREE CREDIT HOURS		109

***Computing Skills Requirement:**

Small Business Management students will be expected to have mastered MS Word, PowerPoint, and Access software applications. Those students who are not proficient in any of the foregoing applications should enroll in CPT 101, PC Applications I.

Students who have proficiency in one or more of the foregoing applications should choose from the following courses to complete the three-credit Computer Skills Requirement:

CIT 101	PC Applications I.3.....	
CIT 093	Project Management.....	1
OADM 113	QuickBooks.....	1
OADM 186	Intro To Word.....	1
OADM 187	Intro to Excel.....	1
OADM 188	Intro to PowerPoint.....	1
OADM 189	Intro to Access.....	1

Note: The following courses may be used by Small Business Management majors to satisfy the Technical Elective requirements. Students currently serving as owner/manager of a small business, upon proof of ownership/management, may substitute the following electives for the BMGT 238 and 239 Practicum Experience.

Electives:		
BMGT 201	Creative Problem Solving.....	3
BMGT 211	Organizational Behavior.....	4
BMGT 216	Business Ethics.....	3

BMGT 219	International Business.....	3
BMGT 229	International Management.....	4
HRM 124	Personnel Interviewing.....	4
BMGT 236	Franchising.....	3
BMGT 237	Home-Based Business.....	3
BMGT 253	The Art and Science of Conflict Resolution.....	4
BMGT 280	Business Etiquette.....	3
CIT 137	Information Presentation.....	3
MKTG 122	Business and the Internet.....	3
MKTG 150	Introduction to e-Commerce.....	3
OADM 113	QuickBooks.....	1
OADM 114	QuickBooks II.....	1
OADM 187	Intro to Excel.....	1

Leadership Development Certificate

COURSE		CR
Quarter 1		
BMGT 220	Leadership Fundamentals.....	4
Quarter 2		
BMGT 201	Creative Problem Solving.....	3
OR		
BMGT 253	The Art and Science of Managing Conflict.....	4
Quarter 3		
BMGT 202	Facilitating Organizational Process.....	3
OR		
BMGT 208	Organizational Communications.....	3
Quarter 4		
BMGT 230	Organizational Development & Change Mgmt.....	5
TOTAL CERTIFICATE CREDIT HOURS		15/16

Managing Interpersonal Skills Certificate

COURSE		CR
Quarter 1		
BMGT 102	Managing Interpersonal Skills I.....	3
Quarter 2		
BMGT 103	Managing Interpersonal Skills II.....	3
Quarter 3		
BMGT 201	Creative Problem Solving.....	3
Quarter 4		
BMGT 202	Facilitating Organizational Processes.....	3
OR		
BMGT 253	The Art and Science of Conflict Resolution.....	4
TOTAL CERTIFICATE CREDIT HOURS		12 -13

Nonprofit Management Certificate

COURSE		CR
Quarter 1		
BMGT 245	Introduction to Nonprofit Management.....	5
Quarter 2		
BMGT 246	Operational Management of Nonprofit Organizations.....	5
Quarter 3		
BMGT 247	Legal and Financial Issues in Nonprofit Management.....	5
Quarter 4		
BMGT 248	Leadership Seminar in Nonprofit Management.....	5
TOTAL CERTIFICATE CREDIT HOURS		20

Pre-MBA Certificate

COURSE		CR
Quarter 1		
ACCT269: Foundations of Accounting ¹		5
FMGT201: Business Finance.....		5
Quarter 2		
BMGT111: Management.....		5
ECON200: Principles of Microeconomics ¹		5
Quarter 3		
MATH135: Elementary Statistics ¹		5
MKTG111: Principles of Marketing.....		5
TOTAL CERTIFICATE CREDITS		30

NOTE: Individuals who have completed one or more of the above courses can substitute the following:

LEGL261: Business Law I.....	3
LOGI100: Principles of Supply Chain Management.....	5
ECON240: Principles of Macroeconomics.....	5
BMGT257: Project Management.....	3

Students must meet the prerequisite before enrolling in these classes. These prerequisites can be completed by taking Math 102 for Accounting and Economics and Math 103 for Statistics with a grade of "C" or better.

Training and Development Certificate

COURSE		CR
Quarter 1		
BMGT 276	Assessment, Analysis & Evaluation.....	4
Quarter 2		
BMGT 277	Instructional Design & Development.....	4
Quarter 3		
BMGT 278	Training Delivery Skills.....	4
TOTAL CERTIFICATE CREDIT HOURS		12

Civil Engineering Technology

Civil Engineering Technology – Civil Track

Associate Degree

Surveying Certificate

Civil Engineering Technology – Survey Track

Associate Degree

The Associate of Applied Science Degree in Civil Engineering Technology provides a basis for entry-level careers in all phases of the construction continuum: planning, design, construction and operations. The Associate of Applied Science is designed as a terminal degree providing those skills necessary for immediate employment. Graduates of the program are prepared to work for either private or governmental segments of the construction industry requiring civil engineering technicians. Specific employment positions include manual or computer assisted (CAD) construction drawing and contract document preparation for commercial, heavy and industrial/institutional projects, construction inspection, survey crew operations, and construction material quality control and quality assurance.

In addition to providing entry-level positions, the degree provides opportunities for individuals seeking career changes, continuing education and skills enhancement. The Civil Engineering Technology Degree is preparation for immediate, productive employment.

The Civil Engineering Technology Surveying Certificate is a one-year, three-quarter program, which provides a basis for entry-level careers in survey field and office operations. The one-year certificate is a directed focus program, which empowers students with those skills necessary for construction layout of buildings and roadways and, working under the direction of a Registered Surveyor, in land surveying and subdivision of land. Specific employment positions include instrument person, field crew chief, and drafter/designer.

The Surveying Certificate encompasses those surveying courses, which when coupled with a Bachelor of Science in Civil Engineering, fulfill the State of Ohio Board of Registration for Engineers and Surveyors Education Requirements toward registration as a Professional Surveyor.

Upon completion of the Associate Degree in Civil Engineering Technology, the graduate will be able to:

- Prepare engineering drawings for public and private work projects utilizing computer aided drafting (CAD).
- Apply appropriate proportioning, mixing, placing, curing and admixtures to ensure quality structural concrete structures.
- Perform appropriate testing of soils, aggregates, asphalt and portland cement concrete, masonry, steel, and wood in accordance with American Society of Testing Methods (ASTM) procedures.
- Apply regulatory and industry standards to design stormwater management systems.
- Apply regulatory and industry standards to design sanitary wastewater collection systems.

- Perform all field operations to determine preliminary route alignment, prepare centerline, offset staking notes, and stake a proposed project for finish grade complete with cut sheet.
- Apply Ohio Department of Transportation (ODOT), Federal Highway Administration (FHWA), and industry design standards to plan, design, and detail a simulated highway including drainage structures.
- Apply subdivision regulations and surveying laws in the preparation of preliminary sketch, preliminary plat, and final plat for a major private platted land subdivision.
- Perform preliminary site investigations, research infrastructure records, secure appropriate codes and regulations, and prepare a set of preliminary drawings of an urban redevelopment site.
- Perform quantity takeoffs and estimates for heavy construction projects.
- Apply an integrated system of digital levels, total stations, data collectors/controllers, global positioning system equipment, and associated software in surveying and construction related problem-solving applications.

Civil Engineering Technology–Civil Track

COURSE	CR
Quarter 1	
ARCH 110 Construction Drafting - Manual I	2
CIVL 120 Basic Construction Materials	3
CMGT 105 Construction Contract Documents	3
CMGT 121 Building Construction Drawings	3
ENGL 101 Beginning Composition	3
MATH 148 College Algebra	5
TOTAL CREDIT HOURS	19
Quarter 2	
ARCH 112 Construction Drafting – CAD I.....	2
CIVL 121 Heavy Construction Materials	3
CIVL 123 Heavy Construction Drawings.....	3
CIVL 125 Heavy Construction Methods	3
ENGL 102 Essay & Research	3
MATH 150 Pre Calculus	5
TOTAL CREDIT HOURS	19
Quarter 3	
ARCH 113 Architectural Drafting – CAD II.....	2
CMGT 131 Construction Quantity Survey.....	3
COMM 105 Speech or COMM 110 Conference and Group Discussion	3
SURV 141 Basic Surveying	4
ENVR 160 OSHA 10-Hr Construction Safety & Health.....	1
PHYS 181 Technical Physics	4
TOTAL CREDIT HOURS	17
Quarter 4	
CIVL 221 Elementary Hydraulics	3
ENGL 204 Technical Writing	3
ENVR 252 Health and Safety Training	3
CIVL 243 Heavy Construction Estimating	3
MECH 130 Statics.....	3
SURV 241 Route Surveying	4
TOTAL CREDIT HOURS	19
Quarter 5	
ARCH 115 MicroStation CAD Drafting I.....	3
CIVL 223 Public Utility Systems	3
MECH 242 Strength of Materials	3
SSCI XXX Social Science 100, 101, 102, 104 or 105.....	5
SURV 245 Survey Law	3
TOTAL CREDIT HOURS	17

Quarter 6		
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
SURV 243	Heavy Construction Standards	4
SURV 248	Advanced Surveying Systems	4
SURV 249	Land Subdivision Systems	3
XXX XXX	Technical Elective	3
TOTAL CREDIT HOURS		19
TOTAL DEGREE CREDIT HOURS		110

Technical Electives must be selected from the following list of courses:

ARCH 237	Structures – Steel, Concrete & Masonry	4
CIVL 291	Field Experience	3
CIVL 299	Special Topics in Civil Engineering Technology	1-5
SURV 242	Computer Applications in Surveying	3
SURV 247	Townsite/Urban Development	3
ENVR 265	OSHA 30-Hr Construction Safety & Health	4

Surveying Certificate

COURSE		CR
Quarter 1		
ARCH 110	Construction Drafting – Manual I (First Term)	2
ARCH 112	Construction Drafting – CAD I (Second Term)	2
CIVL 123	Heavy Construction Drawings	3
ENGL 101	Beginning Composition	3
MATH 148	College Algebra	5
SURV 141	Basic Surveying	4
TOTAL CREDIT HOURS		19

Quarter 2		
ENGL 102	Essay & Research	3
MATH 135	Elementary Statistics or MATH 150 Pre-Calculus	5
REAL 102	Real Estate Law	3
SURV 241	Route Surveying	4
SURV 245	Survey Law	3
TOTAL CREDIT HOURS		18

Quarter 3		
ENGL 204	Technical Writing	3
SURV 243	Heavy Construction Standards	4
SURV 247	Townsite/Urban Development	3
SURV 249	Land Subdivision Systems	3
XXXX XXX*	Technical Elective	4
TOTAL CREDIT HOURS		17
TOTAL CERTIFICATE CREDIT HOURS		54

***Technical Elective Options**

LAND 152	Site Planning	4
SURV 248	Advanced Surveying Systems	4
SURV 299	Special Topics in Surveying	1-5

Civil Engineering Technology - Survey Track

COURSE		CR
Quarter 1		
ARCH 110	Construction Drafting – Manual I	2
SURV 100	Introduction to Geomatics	2
CIVL 120	Basic Construction Materials	3
CMGT 121	Building Construction Drawings	3
ENGL 101	Beginning Composition	3
MATH 148	College Algebra	5
TOTAL CREDIT HOURS		18

Quarter 2		
ARCH 112	Construction Drafting – CAD I	2
CIVL 121	Heavy Construction Materials	3
CIVL 123	Heavy Construction Drawings	3
ENGL 102	Essay & Research	3
GIS 105	Photogrammetry	2
MATH 150	Pre-Calculus	5
TOTAL CREDIT HOURS		18

Quarter 3		
ARCH 113	Architectural Drafting – CAD II	2
LAND 152	Site Planning	4
EET 144	PC Hardware	3
SURV 141	Basic Surveying	4
PHYS 181	Technical Physics	4
TOTAL CREDIT HOURS		17

Quarter 4		
GIS 251	GIS Software I	3
COMM 105	Speech or COMM 110 Conference and Group Discussion	3
ENGL 204	Technical Writing	3
SURV 242	Computer Appl in Surveying	3
SURV 241	Route Surveying	4
ENVR 160	OSHA 10-Hr Construction Safety & Health	1
TOTAL CREDIT HOURS		17

Quarter 5		
GIS 203	Remote Sensing	3
ENVR 252	Health and Safety Training	3
GEOG 280	Introduction to Cartography	5
SSCI XXX	Social Science 100, 101, 102, or 104	5
SURV 245	Survey Law	3
TOTAL CREDIT HOURS		19

Quarter 6		
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
SURV 243	Heavy Construction Standards	4
SURV 248	Advanced Surveying Systems	4
SURV 249	Land Subdivision Systems	3
XXX XXX	Technical Elective	3
TOTAL CREDIT HOURS		19
TOTAL DEGREE CREDIT HOURS		108

Technical Electives must be selected from the following list of courses:

ARCH 115	MicroStation CAD Drafting I	3
CIVL 291	Field Experience	3
SURV 247	Townsite/Urban Development	3
SURV 299	Special Topics in Surveying	1-5

Computer Information Technology

Computer Information Technology Associate Degree

Network Administrator Track

Software Developer Track

User Support Technician Track

Web Developer Track

Computer Literacy Certificate

Database Specialist Certificate

Information Security Certificate

Network Administrator Certificate

Software Developer Certificate

User Support Specialist Certificate

Also see: EDP Auditing Major (Accounting)

Also see: Computer Electronics Major (Electronic Engineering Technology)

The Computer Information Technology curriculum provides graduates with a foundation of logic, programming, operating systems, applications, systems analysis, and networking through a core set of courses. Learners may choose to specialize in a particular plan of study: Network Administrator, Software Developer, User Support, or Web Developer. CIT offers a number of industry subject-specific certificates in database, networking, hardware/software, and applications.

Upon completion of the Associate Degree in Computer Information Technology, Network Administrator Track, the graduate will be able to:

- Participate in collaborative projects utilizing the Systems Development Life Cycle (SDLC).
- Determine project requirements of a computer network system.
- Create project documentation using PC-based applications software.
- Install a variety of server configurations using current network software and protocols.
- Apply workstation configurations using a variety of operating systems commands.
- Integrate project requirements utilizing current database technology.
- Apply operating systems commands for effective disk management.
- Complete a series of exercises to prepare for a popular vendor certification program.

Upon completion of the Associate of Applied Science Degree in Computer Information Technology, Software Developer Track, the graduate will be able to:

- Determine project requirements.
- Design an information technology solution pertaining to the student's degree.
- Develop applications using programming languages.
- Identify networking concepts.
- Prepare project documentation.
- Participate in collaborative projects utilizing the Systems Development Life Cycle (SDLC).

Upon completion of the Associate Degree in Computer Information Technology, User Support Technician Track, the graduate will be able to:

- Participate in collaborative projects utilizing the Systems Development Life Cycle (SDLC).
- Determine project requirements.
- Create project documentation using PC-based applications software.
- Identify and install PC hardware components.
- Utilize fundamental elements of desktop publishing and Web applications to design and create projects, forms and Web pages.
- Apply operating system fundamentals for effective disk management.
- Perform network administration using a variety of network platforms.
- Structure a comprehensive solution to achieve project objectives.

Upon completion of the Associate Degree in Computer Information Technology, Web Developer, the graduate will be able to:

- Participate in collaborative projects utilizing the Systems Development Life Cycle (SDLC).
- Determine project requirements.
- Create project documentation using PC-based applications software.
- Develop applications using Web programming languages.
- Create a multiple page, multiple presentation Web site.
- Integrate project requirements for an e-commerce Web site using current database and networking technology.
- Complete a series of exercises to prepare for a popular vendor certification program.
- Apply operating systems fundamentals for effective disk management.

In addition to many of the Computer Information Technology competencies, a graduate with a Certificate in the Software Developer Track will be able to:

- Demonstrate techniques of object analysis and object design.
- Design and code programs in C++ and Visual Basic.NET.
- Debug a C++ or Visual Basic.NET program.
- Develop Web front-end applications.
- Utilize a database for a Web application.

In addition to many of the Computer Information Technology competencies, a graduate with a Certificate in Database Specialist will be able to:

- Prepare a systems design utilizing a database management system.
- Design and implement an Oracle and Access database.
- Perform basic administration functions of a database management system.
- Understand data warehousing systems.
- Use the Visual Basic.NET language to interface with a database management system.

In addition to many of the Computer Information Technology competencies, a graduate with a Certificate in Information Security will be able to:

- Describe and analyze security threats.
- Protect and organization's system and data.

- Design disaster recovery strategies for the enterprise.
- Design and implement computer forensics strategies.
- Assess network vulnerabilities.
- Recognize and respond to security threats.
- Design and develop security audits for an organization.
- Understand the ethical issues related to network security.
- Design and implement wireless networks.
- Work with VPNs and firewalls.
- Protect Internet connections and intranets as well as critical data from attacks.
- Learn how to carry out and implement secure communications across unsecured networks.

In addition to many of the Computer Information Technology competencies, a graduate with a Certificate in Network Administration will be able to:

- Describe the various types of distributed processing systems and operating systems.
- Design, create, and operate a distributed DBMS.
- Use at least one major LAN operating system.
- Complete an industry standard network system examination.
- Design, create, and implement a distributed processing system to support the information processing requirements for a large information management organization to include installing a DBMS.

In this certificate, the student will learn the fundamental components and terminology of personal computer hardware and software basic concepts. This certificate is designed for beginning computer users to develop computer literacy skills.

Upon completion of the Computer Literacy Certificate, the student will be able to:

- Use the Windows operating system to manage files and folders, including creating, renaming, copying, deleting, and moving.
- Demonstrate proficiency within the Blackboard environment.
- Navigate and explore the Internet and the World Wide Web utilizing Microsoft Internet Explorer.
- Utilize the Internet as an effective research tool.
- Describe the basic elements and terminology of the Windows operating system.
- Create and edit Word documents including a research paper, a resume, and a business letter.
- Create and format an Excel worksheet with embedded charts, formulas, and functions.
- Perform a What-if Analysis in Excel.
- Create and use an Access database including tables, queries, and reports.
- Create a slide show in PowerPoint.
- Integrate Office 2003 Applications and the WWW.

In addition to many of the Computer Information Technology competencies, a graduate with a Certificate in User Support Specialist will be able to:

- Identify the terms and concepts of information systems for

business applications.

- Create project documentation using PC-based applications software.
- Identify and install PC hardware components.
- Develop and maintain a Web page.
- Use DOS and Windows operating system commands to perform basic system operations.
- Participate as a part of a group on a typical business system project.
- Apply the basic principles of Local Area Networks, including various topologies, types of communications, security operations, and available diagnostics.
- Perform basic network administration tasks.
- Explain networking protocols and network configurations, circuit analysis of high-speed modems, packet-switching techniques, pulse code and pulse-width modulation techniques.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Computer Information Technology and Certificate programs.

Network Administrator Track

- MATH 102 – Beginning Algebra I
- OADM 131 – Keyboarding I
- Placement into ENGL101 – English Composition

Software Developer Track

- MATH 104 Intermediate Algebra
- Placement into ENGL101 or 111

User Support Technician Track

- Placement into ENGL101 – English Composition
- Placement into MATH 102 – Beginning Algebra I or completion of DEV 031 – Pre-Algebra
- OADM 131 – Keyboarding I

Web Developer Track

- Placement into ENGL101 – English Composition
- MATH 102 – Beginning Algebra I
- OADM 131 – Keyboarding I

Database Specialist Certificate

- Complete MATH 102 and faculty advisor approval

Information Security Certificate

- CIT 151 – Networking 1

Network Administrator Certificate

- Complete CIT 151 – Networking 1

Software Developer Certificate

- MATH 104 – Intermediate Algebra
- Work experience approved by the Department Chair

User Support Specialist Certificate

- CIT 101 – PC Applications 1
- Placement into ENGL101 – English Composition
- OADM 131 – Keyboarding
- Placement into MATH 102 – Beginning Algebra I

Computer Information Technology Associate Degree, Network Administrator Track

COURSE	CR
Quarter 1	
CIT 101	PC Applications 1 .....3
CIT 103	Computer Concepts and Logic.....3
CIT 121	PC Operating Systems .....3
CIT 151	Networking 1 .....3
ENGL 101	Beginning Composition .....3
BMGT101	Introduction to Business .....5
TOTAL CREDIT HOURS	.....20

Quarter 2	
CIT 102C	PC Applications 2 Module 3 (Access).....1
CIT 123	Workstation Installation & Configuration.....3
CIT 251	Networking 2 .....3
MATH104	Intermediate Algebra .....5
ENGL 102	Essay & Research .....3
TOTAL CREDIT HOURS	.....15

Quarter 3	
CIT 175	Systems Analysis 1 .....4
CIT 233	Expert Access.....3
CIT 250	Network Comm. Systems .....3
CIT 252	Enterprise Networking.....4
ACCT106	Introduction to Accounting I.....5
TOTAL CREDIT HOURS	.....19

Quarter 4	
CIT 171	Database Administration/SQL .....4
CIT 253	TCP/IP.....3
CIT 255	Server Admin I.....4
MKTG 111	Marketing Principles.....5
COMM105	Speech or.....3
COMM 110	Conference & Group Discussion .....3
TOTAL CREDIT HOURS	.....19

Quarter 5	
CIT 163	Visual Basic 1 .....4
CIT 257	Network Security .....3
CIT 271	Data Mining and Data Warehousing .....4
HUM XXX	Humanities 111, 112, 113, 151, 152, or 224 .....5
ENGL204	Technical Writing.....3
TOTAL CREDIT HOURS	.....19

Quarter 6	
CIT 258	Wireless Networking.....3
CIT 282	Capstone for Web Dev., Net Admin, and User Support .....5
LEGL 261	Business Law 1 .....3
SSCIXXX	SSCI 100, 101, 102, 104, or 105 .....5
TOTAL CREDIT HOURS	.....16
TOTAL DEGREE CREDIT HOURS	.....108

Computer Information Technology Associate Degree, Software Developer Track

COURSE	CR
Quarter 1	
CIT 101	PC Applications 1 .....3
CIT 103	Computer Concepts and Logic .....3
MATH 104	Intermediate Algebra .....5
ACCT106	Introduction to Accounting I .....5
ENGL 101	Beginning Composition .....3
TOTAL CREDIT HOURS	.....19

Quarter 2	
CIT 121	PC Operating Systems .....3
CIT 163	Visual Basic 1 .....4
CIT 175	Systems Analysis 1 .....4

ENGL 102	Essay & Research .....3
BMGT 101	Introduction to Business .....5
TOTAL CREDIT HOURS	.....19

Quarter 3	
CIT 137	Advanced Information Presentation .....3
CIT 151	Networking 1 .....3
CIT 263	Visual Basic 2 .....4
CIT 275	Systems Analysis 2 .....4
XXX xxx	Basic Education Elective .....3
TOTAL CREDIT HOURS	.....17

Quarter 4	
CIT 167	C++ Programming 1 .....4
CIT 169	Java Programming 1 .....3
CIT 173	Database Programming.....3
CIT 264	Visual Basic 3 .....4
COMM 105	Speech or .....3
COMM 110	Conference and Group Discussion .....3
TOTAL CREDIT HOURS	.....17

Quarter 5	
CIT 267	C++ Programming 2 .....4
CIT 269	Java Programming 2 .....3
CIT 273	Database Systems.....3
ENGL 200	Business Communications .....3
HUM XXX	HUM 111, 112, 113, 151, 152, or 224 .....5
TOTAL CREDIT HOURS	.....18

Quarter 6	
CIT 280	ACP Examination .....1
CIT 281	Capstone for Software Developer .....5
SSCIXXX	SSCI 100, 101, 102, 104, 105 .....5
XXX XXX	Basic Education Elective .....5
TOTAL CREDIT HOURS	.....16
TOTAL DEGREE CREDIT HOURS	.....106

Computer Information Technology Associate Degree, User Support Track

COURSE	CR
Quarter 1	
CIT 101	PC Applications 1 .....3
CIT 103	Computer Concepts and Logic.....3
MATH104	Intermediate Algebra .....5
XXX XXX	Basic Education Elective .....3
ENGL101	Beginning Composition .....3
TOTAL CREDIT HOURS	.....17

Quarter 2	
CIT 102	PC Applications 2 .....3
CIT 121	PC Operating Systems .....3
ACCT106	Introduction to Accounting I.....5
ENGL102	Essay & Research .....3
BMGT101	Introduction to Business .....5
TOTAL CREDIT HOURS	.....19

Quarter 3	
CIT 123	Workstation Operations.....3
CIT 137	Advanced Information Presentation .....3
CIT 175	Systems Analysis 1 .....4
CIT 231	Expert Excel.....3
ACCT107	Introduction to Accounting II.....5
TOTAL CREDIT HOURS	.....18

Quarter 4	
CIT 125	PC Maintenance.....3
CIT 139	Web Essentials .....3
CIT 149	Groupware .....3
CIT 151	Networking 1 .....3
CIT 233	Expert Access .....3
ENGL204	Technical Writing.....3
TOTAL CREDIT HOURS	.....18

Quarter 5	
CIT 141	Web Publishing.....3
CIT 163	Visual Basic 1.....4
CIT 225	PC Troubleshooting and Diagnosing.....3
CIT 250	Network Communications Systems.....5
HUM XXX	Humanities 111,112,113,151, 152, or 224.....5
TOTAL CREDIT HOURS	.....20

Quarter 6	
CIT 200	Certification Review.....1
CIT 282	Capstone for Web Dev., Net Admin and User Support.....5
SSCIXXX	SSCI 100, 101, 102, 104, 105.....5
COMM105	Speech or
COMM 110	Group Discussion.....3
TOTAL CREDIT HOURS	.....14
TOTAL DEGREE CREDIT HOURS	.....106

Computer Information Technology Associate Degree, Web Developer Track

COURSE	CR
Quarter 1	
CIT 101	PC Applications 1.....3
CIT 103	Computer Concepts and Logic.....3
MATH 104	Intermediate Algebra.....5
SSCI XXX	Social Sciences 100, 101, 102, 104, 105.....5
ENGL 101	Beginning Composition.....3
TOTAL CREDIT HOURS	.....19

Quarter 2	
CIT 121	PC Operating Systems.....3
CIT 102	PC Applications 2.....3
CIT 139	Web Essentials.....3
CIT 175	Systems Analysis 1.....4
ENGL 102	Essay & Research.....3
TOTAL CREDIT HOURS	.....16

Quarter 3	
CIT 137	Advanced Information Presentation.....3
CIT 141	Web Publishing.....3
CIT 163	Visual Basic 1.....4
CIT 233	Expert Access.....3
ENGL 207	Writing for the Web.....3
TOTAL CREDIT HOURS	.....16

Quarter 4	
CIT 145	HTML.....3
CIT 151	Networking 1.....3
CIT 169	Java Programming 1.....3
MKTG 111	Marketing Principles.....5
XXX XXX	Basic Education Elective.....3
TOTAL CREDIT HOURS	.....17

Quarter 5	
CIT 147	Java Script Fundamentals.....3
CIT 171	Database Administration/SQL.....4
CIT 269	Java Programming 2.....3
ENGL204	Technical Writing.....3
ACCT106	Introduction to Accounting I.....5
XXX XXX	Basic Education Elective.....3
TOTAL CREDIT HOURS	.....21

Quarter 6	
CIT 200	Certification Review.....1
CIT 270	Advanced Web Programming.....4
CIT 282	Capstone for Web Dev., Net Admin, and User Support.....5
HUMXXX	HUM 111, 112, 113, 151, 152 or 224.....5
COMM105	Speech or
COMM110	Conference and Group Discussion.....3
TOTAL CREDIT HOURS	.....18
TOTAL DEGREE CREDIT HOURS	.....107

Vocational Education Transfer Option with Ohio State University College of Education

The Computer Information Technology, Web Developer program at Columbus State has completed an articulation agreement with the Technical Education and Training Program of the Ohio State University College of Education. This agreement allows Computer Information Technology, Web Developer students to complete their associate degree at Columbus State, transfer their credits to Ohio State, and complete a baccalaureate degree in Technical Education and Training. Students completing the Ohio State program may be eligible for certification by the Ohio Department of Education to teach in related high school career and technical education programs throughout the State of Ohio. Interested students should contact their Columbus State department chairperson for curriculum requirements and additional details. Please note that course requirements for this transfer option may differ from the standard plan of study published in the catalog.

Computer Literacy Certificate

COURSE	CR
Quarter 1	
CIT 095	Computer File Management.....1
CIT 100	Computer Literacy.....1
Quarter 2	
CIT 094	Web Learning Tools.....1
Quarter 3	
CIT 101	PC Applications 1.....3
TOTAL CERTIFICATE CREDIT HOURS	.....6

Database Specialist Certificate

COURSE	CR
Quarter 1	
CIT 233	Expert Access.....3
CIT 175	Systems Analysis 1.....4
TOTAL CREDIT HOURS	.....7
Quarter 2	
CIT 171	Database Administration/SQL.....4
CIT 173	Database Programming.....3
TOTAL CREDIT HOURS	.....7
Quarter 3	
CIT 273	Database Systems.....3
CIT 271	Data Mining and Data Warehousing.....4
TOTAL CREDIT HOURS	.....7

Quarter 4	
CIT 163	Visual Basic 1.....4
CIT 200	Certification Review.....1
TOTAL CREDIT HOURS	.....5
TOTAL CERTIFICATE CREDIT HOURS	.....26

Information Security Certificate

COURSE	CR
Quarter 1	
CIT 257	Network Security.....3
CIT 258	Wireless Networking.....3
TOTAL CREDIT HOURS	.....6
Quarter 2	
CIT 259	Advanced Network Security.....3
CIT 260	Web Security.....3
TOTAL CREDIT HOURS	.....6

Quarter 3	
CIT 276	Information Security Audit .....3
TOTAL CREDIT HOURS	3
Quarter 4	
CIT 277	Computer Forensics .....3
TOTAL CREDIT HOURS	3
Quarter 5	
CIT 278	Business Continuity & Disaster Recovery.....3
TOTAL CREDIT HOURS	3
Quarter 6	
CIT 200	Certification Review .....1
TOTAL CREDIT HOURS	1
TOTAL CERTIFICATE CREDIT HOURS	22

Network Administrator Certificate

COURSE	CR
Quarter 1	
CIT 250	Network Communication Systems .....3
TOTAL CREDIT HOURS	3
Quarter 2	
CIT 251	Networking 2 .....3
CIT 253	TCP/IP.....3
TOTAL CREDIT HOURS	6
Quarter 3	
CIT 252	Enterprise Networking .....4
TOTAL CREDIT HOURS	4
Quarter 4	
CIT 255	Server Administraton 1 .....4
TOTAL CREDIT HOURS	4
Quarter 5	
CIT 257	Network Security .....3
CIT 258	Wireless Networking.....3
CIT 200	Certification Test Review.....1
TOTAL CREDIT HOURS	7
TOTAL CERTIFICATE CREDIT HOURS	24

Software Developer Certificate

COURSE	CR
Quarter 1	
CIT 145	HTML .....3
CIT 167	C++ Programming 1 .....4
CIT 163	Visual Basic 1 .....4
TOTAL CREDIT HOURS	11
Quarter 2	
CIT 169	JAVA Programming 1.....3
CIT 267	C++ Programming 2 .....4
CIT 263	Visual Basic 2 .....4
TOTAL CREDIT HOURS	11
Quarter 3	
CIT 269	Java Programming 2 .....3
CIT 264	Visual Basic 3 .....4
TOTAL CREDIT HOURS	7
Quarter 4	
CIT 173	Database Programming.....3
CIT 270	Advanced Web Programming.....4
TOTAL CREDIT HOURS	7
TOTAL CERTIFICATE CREDIT HOURS	36

User Support Specialist Certificate

COURSE	CR
Quarter 1	
CIT 102	PC Applications 2 .....3
CIT 103	Computer Concepts & Logic .....3
CIT 121	PC Operating Systems .....3
CIT 139	Web Essentials .....3
TOTAL CREDIT HOURS	12
Quarter 2	
CIT 151	Networking 1 .....3
CIT 123	Workstation Installation and Configuration.....3
CIT 125	PC Maintenance.....3
TOTAL CREDIT HOURS	9
Quarter 3	
CIT 225	PC Troubleshooting and Diagnosing .....3
CIT 250	Network Communications Systems.....3
ENGL204	Technical Writing.....3
TOTAL CREDIT HOURS	9
TOTAL CERTIFICATE CREDIT HOURS	30

Construction Management

Construction Management Associate Degree
Field Supervision Certificate
Estimating/Bidding Certificate
Residential Construction Management Certificate
Vocational Education Transfer Option with Ohio
State University College of Education
2 plus 2 Program: A.A.S. Construction Management to a B.S. in Construction Systems Management from The Ohio State University

The Construction Management program prepares graduates for entry-level employment with all types of construction companies. Inside positions include work assignments in marketing, sales, estimating, and purchasing; field assignments include those in scheduling, cost control, quality assurance, assisting field superintendents, and monitoring safety programs. The local job market for graduates is expected to continue to grow as the Columbus construction industry steadily expands.

In addition to technical and management courses taught at the College, associate degree students have the opportunity to work directly with employers through a summer quarter cooperative job program that fulfills part of the degree program requirements. Students in the program share a course core curriculum with other programs in the Construction Sciences Department. This core provides students with a strong foundation of technical skills as well as a sense of the teamwork needed in the construction field. Students also complete courses in communication skills, technical math, and computer literacy.

Upon completion of the associate degree in Construction Management, the graduate will be able to:

- Analyze and interpret all types of construction drawings and documents.
- Develop conceptual programs and detail in order to calculate quantities of material, labor, and equipment needed for a project.
- Analyze financial data relative to cost budget data of construction work in the field and office.
- Apply data analysis to identify construction problems, specify goals, and execute projects including understanding risk management and safety loss prevention.
- Utilize the critical path and Gantt bar chart methods to organize, track and update as necessary construction projects.
- Identify, understand and apply the elements in construction employee relations and contract law.
- Utilize industry standard software for estimating, planning, scheduling, and cost control.
- Understand the processes of construction disputes, claims and project documentation.
- Obtain working knowledge of safety, health and environmental issues.

Construction Management Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
CMGT 101	Managing a Construction Company .....3
CMGT 105	Construction Contract Documents .....3
CMGT 115	Building Construction Methods .....3
CMGT 121	Building Construction Drawings .....3
CIVL 120	Basic Construction Materials .....3
TOTAL CREDIT HOURS	.....18
Quarter 2	
ARCH 110	Construction Drafting – Manual I.....2
CIT 101	PC Applications 1 .....3
CMGT 106	Supervision of Field Operations .....3
CIVL 123	Heavy Construction Drawings .....3
CMGT 131	Construction Quantity Survey .....3
ENGL 102	Essay & Research .....3
TOTAL CREDIT HOURS	.....17
Quarter 3	
CIVL 125	Heavy Construction Methods .....3
CMGT 135	Safety and Loss Prevention .....3
CMGT 141	Building Estimating .....3
MATH 148	College Algebra .....5
ENVR 101	Introduction to Environmental Science, Safety and Health.....3
ARCH 112	Construction Drafting – CAD I.....2
TOTAL CREDIT HOURS	.....19
Quarter 4	
CMGT 241	Planning and Scheduling .....3
CIVL243	Heavy Construction Estimating .....3
MATH 135	Elementary Statistics .....5
SURV 141	Basic Surveying .....4
ENVR 160	OSHA 10-Hr Construction Safety & Health.....1
XXXX XXX	Technical Elective.....3
TOTAL CREDIT HOURS	.....19
Quarter 5	
COMM 105	Speech .....3
CMGT 251	Construction Cost Controls .....3
CMGT 252	Construction Law .....3
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224 .....5
ECON 200	Principles of Microeconomics .....5
TOTAL CREDIT HOURS	.....19
Quarter 6	
CMGT 261	Project Management .....3
CMGT XXX	CMGT 231 or 281.....3
ENGL 200	Business Communications .....3
SSCI XXX	Social Science 100, 101, 102, 104 or 105.....5
XXX XXX	Tech Elective.....3
TOTAL CREDIT HOURS	.....17
TOTAL DEGREE CREDIT HOURS	.....109
Technical Electives must be selected from the following list of courses:	
CIVL 121	Heavy Construction Materials .....3
CMGT 231	Computer Estimating .....3
CMGT 253	Residential Construction .....3
CMGT 291	Field Experience .....4
SURV 241	Route Surveying.....4
SURV 245	Survey Law .....3
CMGT 281	Computer Estimating Residential .....3
CMGT 282	Sustainable Construction .....3
ENVR 282	Sustainable Building Strategies .....3
ARCH 282	Sustainable Design Strategies .....3
ARCH 283	Sustainable Energy Performance .....3
ACCT 106	Intro to Accounting .....5
BMGT 102	Managing Interpersonal Skills .....3
CMGT 299	Special Topics .....1 – 5
MULT 104	Adult and Pediatric CPR.....0.5
ENVR 265	OSHA 30-Hr Construction Safety & Health.....4

Field Supervision Certificate

Quarter 1

CMGT 105	Construction Contract Documents	3
CMGT 115	Building Construction Methods	3
CMGT 121	Building Construction Drawings	3
MATH 148	College Algebra	5
CIT 101	PC Applications 1	3
TOTAL CREDIT HOURS		17

Quarter 2

CMGT 106	Supervision of Field Operations	3
CIVL 123	Heavy Construction Drawings	3
CIVL 125	Heavy Construction Methods	3
CMGT 131	Construction Quantity Survey	3
ENGL 111	English Composition	5
ENVR 160	OSHA 10-Hr Construction Safety & Health	1
TOTAL CREDIT HOURS		18

Quarter 3

CMGT 135	Safety and Loss Prevention	3
CMGT 241	Planning and Scheduling	3
CMGT 252	Construction Law	3
ENGL 200	Business Communications	3
SURV 141	Basic Surveying	4
TOTAL CREDIT HOURS		16
TOTAL CERTIFICATE CREDIT HOURS		51

Estimating/Bidding Certificate

Quarter 1

CMGT 105	Construction Contract Documents	3
CMGT 115	Building Construction Methods	3
CMGT 121	Building Construction Drawings	3
MATH 148	College Algebra	5
CIT 101	PC Application 1	3
TOTAL CREDIT HOURS		17

Quarter 2

CIVL 123	Heavy Construction Drawings	3
CIVL 125	Heavy Construction Methods	3
CMGT 131	Construction Quantity Survey	3
CMGT 253	Residential Construction	3
ENGL 111	English Composition	5
ENVR 160	OSHA 10-Hr Construction Safety & Health	1
TOTAL CREDIT HOURS		18

Quarter 3

CMGT 141	Building Estimating	3
CMGT 231	Computer Estimating Buildings	3
CMGT 281	Computer Estimating Residential	3
CIVL 243	Heavy Construction Estimating	3
ENGL 200	Business Communications	3
TOTAL CREDIT HOURS		15
TOTAL CERTIFICATE CREDIT HOURS		50

Residential Construction Management Certificate

Quarter 1

CMGT 105	Construction Contract Documents	3
CMGT 121	Building Construction Drawings	3
CMGT 253	Residential Construction	3
MATH 148	College Algebra	5
CIT 101	PC Application 1	3
TOTAL CREDIT HOURS		17

Quarter 2

CMGT 106	Supervision of Field Operations	3
CMGT 131	Construction Quantity Survey	3
CMGT 281	Computer Estimating Residential	3
ENGL 111	English Composition	5
ENVR 160	OSHA 10-Hr Construction Safety & Health	1
TOTAL CREDIT HOURS		15

Quarter 3

CMGT 135	Safety and Loss Prevention	3
CMGT 241	Planning and Scheduling	3
CMGT 252	Construction Law	3
ENGL 200	Business Communications	3
SURV 141	Basic Surveying	4
TOTAL CREDIT HOURS		16
TOTAL CERTIFICATE CREDIT HOURS		48

Vocational Education Transfer Option with Ohio State University College of Education

The Construction Management program at Columbus State has completed an articulation agreement with the Technical Education and Training Program of the Ohio State University College of Education. This agreement allows Construction Management students to complete their associate degree at Columbus State, transfer their credits to Ohio State, and complete a baccalaureate degree in Technical Education and Training. Students completing the Ohio State program may be eligible for certification by the Ohio Department of Education to teach in related high school career and technical education programs throughout the State of Ohio. Interested students should contact their Columbus State department chairperson for curriculum requirements and additional details. Please note that course requirements for this transfer option may differ from the standard plan of study published in the catalog.

2 plus 2 Program: A.A.S. Construction Management to a B.S. in Construction Systems Management from The Ohio State University

Columbus State Community College's Construction Management program has a 2 plus 2 agreement with The Ohio State University for a Bachelor of Science completion program in Construction Systems Management. Interested students should contact the Columbus State department chairperson for curriculum requirements and additional details. Please note that course requirements for this option may differ from the standard plan of study published in the catalog.

Dental Hygiene

The Dental Hygiene program at Columbus State Community College is designed to prepare graduates for successful entry into the oral health profession. The dental hygienist is a member of the dental health team and provides a variety of quality oral hygiene services including health education, prevention, and treatment of oral disease to a wide variety of patients. The Columbus State dental hygiene program emphasizes the didactic and clinical skills required to meet ever-changing oral health care needs. Admission to the program is both limited and selective. Graduates of the program will be eligible to sit for the state, regional, and national examinations for licensure. The Ohio State Dental Board requires a full FBI background check for initial application for licensure.

This program is fully accredited by the American Dental Association's Commission on Dental Accreditation. The commission is a specialized accrediting body recognized by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611.

Upon completion of the Associate of Applied Science Degree in Dental Hygiene, the graduate will:

- possess the skills and knowledge to manage the ethical and professional issues of dental hygiene practice.
- be able to acquire and analyze information in a scientific and effective manner using critical thinking skills.
- be able to demonstrate written comprehension, critical thinking, and skills for the application of assessment, dental hygiene diagnosis, planning, implementation, and evaluation related to the provision of optimal preventive, therapeutic, and educational dental hygiene services to individuals of diverse populations.
- be able to demonstrate knowledge of safe and effective patient care by adherence to proper infection control, HIPAA requirements, and emergency protocol during the provision of client care.
- be able to initiate and assume responsibility for general health promotion and oral disease prevention through participation in community activities using appropriate interpersonal communication and educational strategies.
- be able to apply self-assessment skills in preparation for life-long learning.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Dental Hygiene program. The application deadline is March 30, yearly. The last mandatory information session is held before February 15 of each year. Students are advised to attend an information session before February 15. Applications to the Dental Hygiene program are provided at the information session.

Admissions Requirements

Students may obtain an information packet by calling the Allied Health Office at (614) 287-5215 or by sending an e-mail with name and complete mailing address to: afrank01@csc.edu.

- Attend one mandatory Dental Hygiene Information Session within 12 months before applying to the program to obtain

current admission information and application.

- Achievement of a minimum overall GPA of 2.95 on a 4-point scale based upon the completion of courses at the college most recently attended or Columbus State Community College.
- Students must complete all General Education (G) and Basic-related (B) courses with a grade of "C" or better.
- Placement into MATH 148 or completion of MATH 104
- Placement into ENGL 101 or completion of ENGL 100 or ESL 100
- Placement into "No Reading Required" or completion of DEV 044
- BIO 261 Human Anatomy with grade "C" or better
- BIO 262 Human Physiology with grade "C" or better
- Mandatory observation (20 hours) of a dental hygienist working in a dental office, clinic, or other dental hygiene setting. Further specific information is given during the information sessions.
- Students applying to the Dental Hygiene program must submit official high school and college transcripts to Columbus State Community College, Records and Registration Office, by January 20 of the year of application so that transcripts may be evaluated and posted.
- International students or students who have international transcripts must submit official transcripts to an official transcript evaluation agency by November 30. Further information is given during the information session. Records and Registration may have further requirements for international students, thus international students should contact them before November 30.
- Completion of the Nurse Entrance Test (NET) is required for admission to dental hygiene. Further specific information is given during the information session.
- ALL admission criteria MUST be met by March 30 of the application year.

Visit or contact the Dental Hygiene Program Coordinator, Cindy Evans, Office, UN 407, (614) 287- 2435, to obtain a dental hygiene information packet.

Statement Regarding Infectious Diseases

Students in any of the Allied Health programs, including Dental Hygiene, perform their clinical work on real people. Columbus State does not discriminate against students, faculty, or patients in any way, or based on color, creed, national origin, gender, disability or sexual preference. The patient populations with whom we work come from all walks of life, and students may therefore be exposed to many types of communicable diseases. These are not limited to but may include Hepatitis (A, B, C or D), HIV/AIDS, herpes, tuberculosis, measles, mumps, rubella, etc.

All students are required to have appropriate immunizations after being admitted to the program (information is given to all admitted students). Additionally, although all precautions are taken to minimize exposure and risk, there is always a slight possibility that precautions may fail or that a student may accidentally expose him/herself. All students entering the Dental Hygiene program must be aware of this slight, but real, potential. Students are required to maintain personal health insurance.

Dental Hygiene Program

COURSE	CR
Quarter 1	
PSY 235 Psychology of Adjustment	3
CHEM 113 Chemistry/Biochemistry	5
DHY 101 Preventive Concepts I	1
DHY 110 Introduction to Dental Hygiene	4
DHY 140 Head & Neck Anatomy & Tooth Morphology	3
DHY 145 Head & Neck Anatomy & Tooth Morphology Lab	1
DHY 250 Oral Histology	1
TOTAL CREDIT HOURS	18
Quarter 2	
BIO 263 Human Pathophysiology	5
DHY 102 Preventive Concepts II	1
DHY 120 Pre-Clinic	4
DHY 130 Dental Radiography	3
DHY 135 Dental Radiography Lab	1
DHY 260 Periodontology	3
TOTAL CREDIT HOURS	17
Quarter 3	
ENGL 101 Beginning Composition	3
BIO 115 Microbiology	5
DHY 103 Techniques I	1.5
DHY 121 Clinic I	4
DHY 214 Treatment Planning	0.5
DHY 282 Biostatistics and Research for Dental Hygiene	1
DHY 283 Community Dental Health I	1
TOTAL CREDIT HOURS	16
Quarter 4	
ENGL 102 Essay and Research	3
HOSP 153 Nutrition	5
DHY204 Techniques II	1.5
DHY 220 Clinic II	4
DHY 240 Dental Materials	1
DHY 245 Dental Materials Lab	1
DHY 251 Oral Pathology	3
TOTAL CREDIT HOURS	18.5
Quarter 5	
HUM XXX Humanities 111,112,113, 151,152, or 224	5
DHY 205 Techniques III	2
DHY 221 Clinic III	4
DHY 270 Pharmacology	2
DHY 290 Pain Control Management	1.5
DHY 295 Pain Control Management Lab	1
TOTAL CREDIT HOURS	15.5
Quarter 6	
COMM 105 Speech	3
ENGL 200 Business Communications	3
DHY 206 Techniques IV	1
DHY 222 Clinic IV	4
DHY 275 Dental Hygiene in Review Lab	0.5
DHY 284 Community Dental Health II	2
TOTAL CREDIT HOURS	13.5
Quarter 7	
SSCI XXX Social Science 100, 101, 102, 104 , 105	5
DHY 207 Techniques V	1
DHY 215 Case Studies	0.5
DHY 223 Clinic V	4
DHY 285 Community Dental Health III	1
TOTAL CREDIT HOURS	11.5
TOTAL DEGREE CREDIT HOURS	110

Dental Laboratory Technology

Dental Laboratory Technology/Small Business Management (Associate of Technical Studies Degree) Dental Laboratory Technology Certificate

Dental laboratory technicians are skilled artisans and small business managers. They create the appliances that restore or replace oral tissues or structures. They fabricate complete dentures, removable partial dentures, crowns, and bridges and may become owners and/or managers of a dental laboratory facility.

The Dental Laboratory Technology four quarter (one year) certificate program provides students with experience in fabricating a wide variety of dental appliances, using state-of-the art materials and equipment. The program develops skill, not only in proper construction, but also in attractive appearance and accuracy of fit for patient comfort. Because workers in the dental lab area may be exposed to infectious materials and communicable diseases, the programs emphasizes safety and infection control. The Dental Laboratory Technology/Small Business Management seven quarter Associate of Technical Studies Degree program provides knowledge and skills of small business management that will enable a graduate to own and/or manage a dental laboratory, as well as providing all the competencies of the certificate program.

New students enter the program in the autumn quarter, but applications to the program may be submitted at anytime.

Upon completion of the Certificate in Dental Laboratory Technology, the graduate will be able to:

- Design and fabricate complete dentures, removable partial dentures, crowns and bridges to a clinically acceptable degree.
- Apply learned theories to problem cases involving all dental laboratory procedures.
- Identify acceptable dental impressions submitted from clients.
- Read and accurately interpret dental laboratory prescriptions.
- Select and safely use the proper materials and equipment for a given case.
- Recognize specific landmarks of the oral cavity associated with a given case.
- Install, adjust, and store equipment and supplies.
- Demonstrate the attitude, abilities, and professionalism essential for the welfare of the patient.
- Practice safety and health regulations as established by the state and federal government.

In addition to the certificate program competencies, the graduate of the Dental Laboratory/Small Business Management ATS Program will be able to:

- Identify the fundamentals in planning and executing the start up of a new small business.
- Describe the necessary competence in managing a small business enterprise, including effective operation of an established business, strategic planning, market analysis, pricing, inventory control, and credit collection.

- Demonstrate knowledge of basic accounting principles used to operate a small business.
- Describe marketing principles as they apply to small business.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Dental Laboratory Technology certificate and ATS programs:

- High school graduate or GED equivalency
- Contact the Dental Laboratory for an information packet or to schedule an interview by calling (614) 287-2547, or email cbrownfi@csc.edu.

Dental Laboratory Technology/Small Business Management (Associate of Technical Studies)

COURSE	CR
Quarter 1	
DENT 101 Materials I	3
DENT 111 Anatomy	3
DENT 121 Complete Dentures I	3
DENT 132 Occlusion	3
TOTAL CREDIT HOURS	12
Quarter 2	
ENGL 101 Beginning Composition	3
DENT 142 Removable Partial Dentures I	3
DENT 153 Fixed Partial Dentures I	3
DENT 275 Ceramics I	4
TOTAL CREDIT HOURS	13
Quarter 3	
ENGL 102 Essay and Research	3
DENT 285 Orthodontics	2
DENT 296 Applied Lab I	3
DENT 123 Complete Dentures III or	3
DENT 244 Removable Partial Dentures III or	3
DENT 256 Fixed Partial Dentures IV or	3
DENT 276 Ceramics II	3
TOTAL CREDIT HOURS	11
Quarter 4	
DENT 297 Applied Lab II	7
ENGL 200 Business Communication	3
SSCI XXX Social Science 100,101, 102, 104 or 105	5
TOTAL CREDIT HOURS	15
Quarter 5	
COMM 105 Speech	3
HUM XXX Humanities, 111, 112, 113, 151, 152, or 224	5
MATH 101 Business Math	5
CIT 101 PC Applications II	3
TOTAL CREDIT HOURS	16
Quarter 6	
BMGT 101 Principles of Business	5
BMGT 231 Small Business Development	4
ACCT 106 Introduction to Accounting	5
CIT 102 PC Application II	3
TOTAL CREDIT HOURS	17
Quarter 7	
BMGT 232 Small Business Operations	4
BMGT 102 Managing Interpersonal Skills I	3
MKTG 111 Marketing Principles	5
TOTAL CREDIT HOURS	12
TOTAL CERTIFICATE CREDIT HOURS	97

Dental Laboratory Technology Certificate

COURSE	CR
Quarter 1	
DENT 101 Materials I	3
DENT 111 Anatomy	3
DENT 121 Complete Dentures I	3
DENT 132 Occlusion	3
TOTAL CREDIT HOURS	12
Quarter 2	
ENGL 101 Beginning Composition	3
DENT 142 Removable Partial Dentures I	3
DENT 153 Fixed Partial Dentures I	3
DENT 275 Ceramics I	4
TOTAL CREDIT HOURS	13
Quarter 3	
ENGL 102 Essay and Research	3
DENT 285 Orthodontics	2
DENT 296 Applied Lab I	3
DENT 123 Complete Dentures III or	3
DENT 244 Removable Partial Dentures III or	3
DENT 256 Fixed Partial Dentures IV or	3
DENT 276 Ceramics II	3
TOTAL CREDIT HOURS	11
Quarter 4	
DENT 297 Applied Lab II	7
TOTAL CREDIT HOURS	7
TOTAL CERTIFICATE CREDIT HOURS	43

All Dental Lab classes are held in the mornings from 8:00 a.m. until 1:00 p.m. New classes start each Autumn Quarter.

Digital Design and Graphics

(Formerly Graphic Communications)

Digital Design and Graphics Associate Degree

Desktop Publishing Certificate

Digital Design Certificate

Digital Media Certificate

Digital Design and Graphics incorporates all of the processes and industries that create, develop, produce or disseminate ideas, concepts, and information utilizing words or images. Digital Design and Graphics includes advertising, printing, publishing, packaging, electronic imaging, and their allied industries. Effective contemporary digital design and graphics requires a mix of communications technologies including print, computer graphics, and interactive media/Web design technologies.

Graduates of the Digital Design and Graphics program will have the conceptual, creative, and technical skills necessary for a variety of entry-level positions in the printing and publishing industries including electronic pre-press operators, graphic designers, estimators, and computer artists.

Upon completion of the Associate Degree in Digital Design and Graphics the graduate will be able to:

- Specify type styles and sizes, coordinate colors, and employ the elements of design to communicate effectively.
- Be able to handle prepress jobs with bleeds, traps, overprints, reverses, and screen tints.
- Use a densitometer and colorimeter to monitor dot gain, solid ink density, hue error, grayness, and LAB.
- Utilize QuarkXPress, InDesign and Photoshop to generate images consistent with computer-supplied layouts or to correct customer-supplied files.
- Use Illustrator to generate art or to correct customer-supplied files.
- Use communication skills (verbal, written, and graphic) to interact effectively with both internal and external customers.
- Understand the components of, and the interrelationship among, the various segments within digital design and graphics.
- Understand the basic concepts of project management including scope definition, resource allocation, and scheduling.
- Understand selling theory and the phases of the sales process from initial contact to close.
- Be familiar with the basics of interactive media production as it impacts cross-media projects.
- Understand the business components within the digital design and graphics industry.
- Understand quantitative measures used for quality control within the digital design and graphics industry.
- Understand digital camera composition and color correction techniques.

Certificates in Desktop Publishing and Digital Design combine design and typography basics with focused instruction on industry-standard page layout, image manipulation, and computer illustration software. These certificates are designed for working professionals with significant experience in digital design and graphics.

The Digital Media Certificate is a multi-disciplinary certificate combining the fields of branding, design and graphics, digital audio/video production, e-Commerce, interactive media, photography, and marketing communications. This certificate prepares students for employment in the advertising industry.

Digital Design and Graphics Associate Degree

COURSE	CR
Quarter 1	
GRPH 110 Survey of Media	5
GRPH 112 Introduction to Computer Design	5
GRPH 113 Fundamentals of Storyboarding	4
ENGL 101 Beginning Composition	3
TOTAL CREDIT HOURS	17

Quarter 2	
FOTO 114 Digital Photography	4
GRPH 122 Publishing with Quark & InDesign	5
GRPH 251 Photoshop and Design I	5
ENGL 102 Essay & Research	3
MATH 103 Algebra II	4
TOTAL CREDIT HOURS... ..	22

Quarter 3	
GRPH 131 Advertising and Design I	5
GRPH 150 Packaging Design I	5
IMMT 122 Fundamentals of Digital Media	4
COMM 105 Speech	3
MKTG 102 Branding	3
TOTAL CREDIT HOURS	20

Quarter 4	
GRPH 242 Media Color Management	5
GRPH 243 Vector Illustration.....	5
GRPH 253 Package Prototyping (Form Z).....	4
IMMT 216 Media Graphics & Optimization (Photoshop/Image Ready).....	4
TOTAL CREDIT HOURS... ..	18

Quarter 5	
IMMT 262 Web Publishing–Site Design.....	4
BMGT 257 Project Management	3
ENGL 200 Business Communications	3
SSCI 100 Globalization and the Social Sciences	5
TOTAL CREDIT HOURS	10

Quarter 6	
GRPH 291 Preparing a Professional Portfolio	4
GRPH XXX Technical Electives	4
HUM XXX Humanities 111,112,113,151,152 or 224	5
GRPH 284 Ad Agency I	4
TOTAL CREDIT HOURS	17
TOTAL DEGREE CREDIT HOURS	104

Technical Electives must be selected from the following list of courses:

FOTO 111 Black and White Photography	4
GRPH 260 Digital Design and Graphics Practicum.....	4
GRPH 261 Digital Design and Graphics Seminar.....	2
FOTO 270 Advanced Black and White Photography	4
FOTO 271 Studio Lighting	4
GRPH 273 Advertising Design II	5
FOTO 278 Photo Lab	1
FOTO 281 Color Photography.....	4
FOTO 288 Advanced Digital Photography.....	3
GRPH 297, 298, 299 Special Topics in Digital Design and Graphics.....	1-3

Students should request a program plan of study from their faculty advisor.

Desktop Publishing Certificate

COURSE	CR
Quarter 1	
GRPH 122 Digital Publishing	5
Quarter 2	
GRPH 131 Design and Typography	4
GRPH 243 Computer Graphic Illustration	3
CERTIFICATE TOTAL	12

Digital Design Certificate

COURSE	CR
Quarter 1	
GRPH 112 Introduction to Computer Design	5
GRPH 131 Advertising Design I	5
IMMT 101 Introduction to Interactive Media	4
TOTAL CREDIT HOURS	14
Quarter 2	
FOTO 114 Digital Photography	5
GRPH 273 Advertising Design II	3
TOTAL CREDIT HOURS	8
Quarter 3	
GRPH 122 Publishing with QuarkXpress	5
GRPH 284 Presentation Production	4
TOTAL CREDIT HOURS	9
CERTIFICATE TOTAL:	31

Digital Media Certificate

COURSE	CR
Quarter 1	
GRPH 112 Introduction to Computer Design	5
FOTO 114 Digital Photography	4
IMMT 150 Basic Cinematography Editing	4
MKTG 102 Branding	3
TOTAL CREDIT HOURS	17
Quarter 2	
IMMT 122 Digital Media Preparation	3
IMMT 216 Dynamic Graphics	4
MKTG 138 Promotional Writing	3
TOTAL CREDIT HOURS	10
Quarter 3	
GRPH 251 Photoshop and Design I	5
IMMT 262 Dreamweaver	4
MKTG 150 eCommerce Marketing	3
TOTAL CREDIT HOURS	12
CERTIFICATE TOTAL	39

Digital Photography (FOTO) (New program effective Autumn 2007)

Digital Photography Associate Degree Photography Certificate

The Digital Photography Program is being created to satisfy the growing need for qualified digital photographers in the short and long term in Columbus and central Ohio. This program is designed to allow graduates to take full advantage of the benefits of a comprehensive college education while building a strong foundation in a broad range of courses spanning digital design, marketing, communications and Web design courses. This multi-disciplinary digital integration reflects the needs of the professional digital photography industry. This digital evolution has lowered the barriers to professional entry, forcing existing film photographers to switch to digital while allowing many new people in related fields to pursue the craft of digital photography.

Graduates of this program will be prepared for careers in a variety of digital photography, digital services and imaging-related fields, be able to pursue self-employment options or be prepared to continue their education at a four year institution. The majority of the digital photography curriculum will revolve around digital capture, digital workflow, and digital image management. Students will develop a balance of technical and aesthetic skills that relate to digital photography, equipment and related software that is complemented by coursework in digital design, Web site design, interactive video/audio, and marketing/branding on the Web.

Upon completion of the Associate Degree in Digital Photography the graduate will be able to:

- Demonstrate an understanding of the principles associated with craft, scholarly theory and profession of digital photography.
- Recognize, evaluate, combine and utilize all appropriate skills and techniques of digital photography in relation to digital capture, digital equipment imaging needs, and digital workflow management.
- Learn to balance complex technical and aesthetic concerns when fulfilling digital photography assignments from conception to completion.
- Develop strategic, business and implementation plans for digital photography projects including budgeting, software and hardware procurement and use, staffing, training and legal issues.
- Describe how digital photography is utilized in local and regional career applications and processes.
- Demonstrate appropriate digital image-editing software and computer skills that directly support digital photography editing/enhancement and post-production workflow techniques.
- Demonstrate aesthetic and technical problem-solving skills to determine the best visual solutions to different assignments and situations.
- Think critically.
- Communicate effectively.
- Model professional and ethical behavior.
- Recognize the value of human diversity.
- Demonstrate self-management skills, life management skills, and interpersonal skills.

Students will need to own class-specific equipment to pursue this degree. For example, FOTO 111, 150 and 160 require a student-provided, film-based SLR camera. A Digital SLR (DSLR) with a minimum of 6 meg. capture will be needed to enter any 200 level photography course that is focused on digital capture. The school will provide medium and large format film cameras for in-class projects and use. Check with the photography advisor to discuss specific course needs and options.

The Photography Certificate is designed to prepare students for employment as photography assistants in the photography industry. This program focuses on the development of skills and competencies in the use of traditional and digital cameras, advanced black and white and color photography, studio photography, lighting and tone control. A course on how to develop and manage a successful photography business is also included.

Digital Photography Associate Degree

COURSE	CR
Quarter 1	
FOTO 111 Black and White Photography (F)	4
FOTO 114 Digital Photography	4
GRPH 112 Introduction to Computer Design	5
ENGL 101 Beginning Composition	3
MATH 103 Algebra II	4
TOTAL CREDIT HOURS	20
Quarter 2	
FOTO 112 Photoshop for Photographers I	5
FOTO 115 Digital Photography & Design	3
FOTO 150 Advanced Black & White Photography (F).....	4
ENGL 102 Essay & Research	3
GRPH 131 Advertising and Design I	5
TOTAL CREDIT HOURS...	20
Quarter 3	
FOTO 160 Color Photography	3
FOTO 214 Advanced Digital Photography	5
IMMT 216 Media Graphics & Optimization.....	4
MKTG 102 Branding	3
FOTO xxx Specialization Track 1 or Tech. Elective	3
TOTAL CREDIT HOURS	18
Quarter 4	
FOTO 220 Studio Lighting	4
FOTO 250 View Camera Photography (F)	4
IMMT 262 Web Publishing Site Design.....	4
ENGL 200 Business Communications.....	3
MKTG 285 Advertising & Promotion on the Web	1
COM 105 Speech	3
TOTAL CREDIT HOURS...	19
Quarter 5	
FOTO 260 Studio & Environmental Portraiture.....	4
FOTO 265 Photojournalism	3
SSCI 100 Globalization and the Social Sciences	5
FOTO XXX Specialization Track 2 or Tech. Elective	3
TOTAL CREDIT HOURS	15
Quarter 6	
FOTO 290 Business of Photography.....	4
FOTO 292 Portfolio Development.....	3
FOTO XXX Specialization Track 3 or Tech. Elective	3
HUM XXX Humanities 111,112,113,151,152 or 224	5
BMGT 257 Project Management	3
TOTAL CREDIT HOURS	18
TOTAL DEGREE CREDIT HOURS	110

Technical Electives must be selected from the following list of courses:

FOTO 113	Photoshop for Photographers II	5
FOTO 117	Digital Panoramic Photography	3
FOTO 118	Real Estate Photography	3
FOTO 119	Digital Infrared Photography	3
FOTO 122	Landscape Photography.....	3
FOTO 125	Night Photography	3
FOTO 130	Macro & Close-Up Photography	3
FOTO 232	Industrial Photography.....	3
FOTO 266	Photojournalism II	3
FOTO 297	Field Studies in Digital Photography.....	1 to 5
FOTO 299	Special Topics in Photography.....	1 to 5

Students should request a program plan of study from their faculty advisor.

Photography Certificate

COURSE	CR
Quarter 1	
FOTO 111 Black and White Photography	4
FOTO 112 Photoshop for Photographers	5
FOTO 114 Digital Photography	4
TOTAL CREDIT HOURS	12
Quarter 2	
FOTO 150 Advanced Black and White Photography	4
FOTO 160 Color Photography	3
FOTO 214 Advanced Digital Photography.....	5
TOTAL CREDIT HOURS	12
Quarter 3	
FOTO 220 Studio Lighting	4
FOTO 265 Photojournalism	3
FOTO 290 The Business of Photography	4
TOTAL CREDIT HOURS	11
CERTIFICATE TOTAL.....	35

Early Childhood Development

Early Childhood Development Associate Degree Child Care Administration Certificate Infant/Toddler or School Age Child Care or Preschool Education Certificate Child Development Associate (CDA) Credential Preparation

Family needs and increased focus on appropriate early education for all young children continues to drive the demand for qualified professionals in early childhood education. Early childhood educators are responsible for planning daily routines and curriculum, utilizing community resources to enrich programs and support the needs of children and their families. The ECD graduate is employed as a pre-kindergarten teacher, Head Start teacher, preschool/childcare administrator, nanny, infant/toddler caregiver, or family childcare provider.

The Early Childhood Development (ECD) program is approved by the Ohio Department of Education to offer the Pre-Kindergarten Associate Teaching license. This license qualifies holders for pre-kindergarten positions in a variety of early childhood settings, including Head Start, public school preschool, inclusive settings for children with special needs, as well as part-day and full day child care programs. The Early Childhood course of study exceeds the requirements for staff as outlined in the revised Ohio Child Day Care Licensing Rules.

Upon completion of the Associate Degree in Early Childhood Development, the graduate will be able to:

- Demonstrate knowledge of theories of human growth, development, and learning related to children, birth to age 8.
- Plan appropriate learning experiences for individuals as well as groups of young children, in inclusive settings.
- Demonstrate a competent, respectful, nurturing teaching style to meet children's needs.
- Develop appropriate educational practices for young children that foster the growth of skills in problem solving, decision-making, critical thinking, communication, and emerging literacy.
- Use appropriate teaching strategies to address individual differences in developmental levels, culture, and learning styles.
- Recognize and respect unique characteristics of families and demonstrate appropriate strategies to support and address family needs.
- Demonstrate a variety of strategies to evaluate children's growth and development in cooperation with parents and related professionals.
- Design a physically safe environment to facilitate children's independence and competence through constructive experiences.
- Demonstrate knowledge of content areas and familiarity with Ohio Department of Education pre-kindergarten standards and K-3 benchmarks.
- Reflect and evaluate one's professional, interdisciplinary role as teacher, team member, lifelong learner, and advocate for children and families.

Specific Program Admissions Information

Listed below are additional requirements for formal admission to Early Childhood Development.

- High school graduate or GED equivalency
- Placement into Beginning Composition - ENGL 101
- Completion of the following five courses with a grade of "C" or above:
 - ECD 105 - Self Concept
 - ECD 106 - Observing and Recording
 - ECD 107 - Curriculum Planning
 - ECD 108 - Creative Curriculum
 - PSY 261 - Introduction to Child Development

Early Childhood Development Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
PSY 100 Introduction to Psychology	5
ECD 101 Introduction to ECD	1
ECD 105 Self Concept.....	3
ECD 106 Observing and Recording	1
ECD 107 Curriculum Planning	3
TOTAL CREDIT HOURS	16

Quarter 2	
ENGL 102 Essay & Research	3
PSY 261 Child Development	5
ECD 108 Creative Curriculum.....	3
ECD 201 Health and Safety	3
OR	
ECD 200 First Aid &	1
ECD 202 Communicable Disease &	1
ECD 204 Child Abuse & Neglect	1
TOTAL CREDIT HOURS	14

Quarter 3	
SOC 101 Introduction to Sociology	5
MATH 101 Business Mathematics	5
ECD 112 Physical Development Curriculum	3
ECD 172 ECD Field Experience I	1
ECD 162 ECD Field Seminar I	1
ECD 109 Language Experiences in Early Childhood Programs	3
TOTAL CREDIT HOURS	18

For students who plan to transfer, higher math is required.

Quarter 4	
COMM 105 Speech.....	3
ECD 114 Cognitive Curriculum	3
ECD 162 Seminar II.....	1
ECD 172 Field Experience II.....	1
ECD 120 Interpersonal Communications in Human Services	4
SSCI101 Cultural Diversity.....	5
TOTAL CREDIT HOURS	17

Quarter 5	
ENGL 200 Business Communications	3
ECD 206 Social Development Curriculum	3
ECD 212 Family Ecology	3
ECD 110 Infant/Toddler Curriculum*	3
ECD 163 ECD Seminar III*	1
ECD 173 ECD Field Experience III*	1
* to be taken concurrently	
TOTAL CREDIT HOURS	14

Quarter 6	
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224 .....5
ECD 205	Parent Involvement in Early Childhood Programs .....3
ECD XXX	Technical Elective (choose ECD 210 and others).....3
ECD 208	Young Children with Special Needs .....3
ECD 264	ECD Seminar IV .....1
ECD 274	ECD Field Experience IV .....1
TOTAL CREDIT HOURS	.....16
Quarter 7	
NSCI 101	Natural Science .....5
ECD 207	Guidance/Discipline in Early Childhood .....3
ECD 265	ECD Seminar V and .....1
ECD 275	ECD Field Experience V .....1
	OR
ECD 267	Student Teaching Seminar and .....2
ECD 277	Student Teaching Practicum.....3
	OR
ECD 260	Administration Seminar .....1
ECD 270	Administration Field Experience .....1
TOTAL CREDIT HOURS	.....10
TOTAL DEGREE CREDIT HOURS	..... 104-107
Student Teaching is required for transfer to Otterbein or Capital University	

*Technical Electives	
ECD 101	Intro to Child Development Associate.....1
ECD 115	School Age Child Care.....3
ECD 151	ECD Media Resource I .....1
ECD 152	ECD Media Resource II .....1
ECD 190	Activity Plan Seminar .....1
ECD 210	Administration and Staff Dynamics.....3
ECD 221-230	Contemporary Issues in Early Childhood .....1-3
ECD 231	Phonics and the Structure of Language .....5
	(ECD 231 is for ECD majors who plan to attend Otterbein.)

Child Care Administration Certificate

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
ECD 105	Self Concept.....3
ECD 106	Observing and Recording .....1
ECD 107	Curriculum Planning .....3
ECD 201	Health and Safety .....3
TOTAL CREDIT HOURS	.....13

Quarter 2	
PSY 261	Child Development .....5
ECD 190	Activity Plan Seminar .....1
ECD 108	Creative Curriculum.....3
ECD 120	Interpersonal Communications in Human Services .....4
TOTAL CREDIT HOURS	.....13

Quarter 3	
MATH 101	Business Mathematics .....5
ECD 109	Language Exp. Early Childhood Programs .....3
ECD 162	ECD Field Seminar I or II .....1
ECD 172	ECD Field Experience I or II .....1
ECD 205	Parent Involvement in Early Childhood Programs .....3
ECD 208	Young Children with Special Needs .....3
TOTAL CREDIT HOURS	.....16

Quarter 4	
ENGL 200	Business Communications .....3
ECD 110	Infant/Toddler Curriculum .....3
ECD 206	Social Development Curriculum.....3
	OR
ECD 207	Guidance/Discipline in Early Childhood .....3
ECD 211	Child Care Administration .....4
ECD 270	Administration Practicum .....1
TOTAL CREDIT HOURS	.....17
TOTAL CERTIFICATE CREDIT HOURS	.....59

Infant/Toddler or School Age Child Care or Pre-School Education Certificate

COURSE	CR
Quarter 1	
ECD 105	Self Concept.....3
ECD 106	Observing and Recording .....1
ECD 107	Curriculum Planning .....3
ECD 108	Creative Curriculum.....3
PSY 261	Child Development .....5

Depending on your own interests and goals, add one of the following courses:

Infant and Toddlers Care Givers

ECD 110	Infant/Toddler Curriculum .....3
---------	----------------------------------

Preschool Education

ECD 109	Language Exp. Early Childhood Programs or .....3
ECD 114	Cognitive Curriculum .....3

School Age Child Care Personnel

ECD 115	School Age Child Care.....3
TOTAL CREDIT HOURS	.....18
TOTAL CERTIFICATE CREDIT HOURS	.....18

Child Development Associate CDA/Credentialing Preparation

COURSE	CR
Quarter 1	
ECD 102	Introduction to CDA .....1
ECD 105	Self Concept.....3
ECD 106	Observing and Recording .....1
ECD 107	Curriculum Planning .....3
ECD 108	Creative Curriculum.....3
ECD 104	CDA Competencies.....1
TOTAL CREDIT HOURS	.....12
TOTAL CERTIFICATE CREDIT HOURS	.....12

With completion of 18 credit hours in ECD, minimum qualifications to be a child care administrator by Ohio Child Day Care Licensing Standards will have been met, provided the candidate has two years work experience in group care of young children.

Electro-Mechanical Engineering Technology Associate Degree

The Electro-Mechanical program is a marriage of Columbus State's Mechanical Engineering Technology and Electronics Engineering Technology programs.

The skills Electro-Mechanical Technicians possess are used in virtually every industry—from manufacturing, to environmental control, to food and pharmaceutical production, to power plants. Electro-Mechanical Technicians are immediately able to contribute to the companies that hire them.

Electro-Mechanical Technicians are in great demand. Any industry that uses electrical components and/or has any level of automation and process control needs and will always need EMEC technicians.

The most rewarding part of this field is the variety and creativity it affords. EMEC technicians use their knowledge and skills to solve problems and come up with creative solutions daily.

Electro-Mechanical Engineering Technicians perform both preventive and corrective maintenance on electro-mechanical systems as well as aiding in the design of such systems.

Electro-Mechanical Engineering Technology also shares related courses with the Electronic Engineering Technology, Mechanical Engineering Technology and Quality Assurance Technology. For additional information refer to those section(s) of the Catalog.

Electro-Mechanical Engineering Technology Associate Degree

COURSE	CR
Quarter 1	
MATH 111 Technical Mathematics I	4
EET 111 Electronic Circuits I	4
EET 112 Electronic Circuits I Lab.....	2
MECH 112 Computer Applications in Manufacturing	3
TOTAL CREDIT HOURS	16
Quarter 2	
ENGL 101 Beginning Composition	3
MATH 112 Technical Math II	4
PHYS 181 Technical Physics (Mechanical)	4
EET 120 Electronic Circuits II.....	4
EET 121 Electronic Circuits II Lab.....	2
TOTAL CREDIT HOURS	17
Quarter 3	
ENGL 102 Essay and Research	3
EET 130 Electronic Devices I.....	4
EET 132 Digital Electronics I.....	3
EET 131 Electronic Devices I Lab.....	2
MECH 120 Mechanical Drafting I	3
MECH 131 Hydraulics	3
TOTAL CREDIT HOURS	18

Quarter 4	
COMM 105 Speech.....	3
PHYS 183 Technical Physics (Prop. Mat.)	4
MECH 243 Robotics	3
EMEC 250 Motors & Controls	3
HUM XXX Humanities 111,112,113,151, 152 or 224	5
TOTAL CREDIT HOURS	18

Quarter 5	
ENGL 204 Technical Writing	3
EMEC 251 Electro-Mech. Controls I	4
MATH 135 Elementary Statistics	5
QUAL 240 Total Quality Management	3
EET 255 Instrumentation and Controls.....	3
TOTAL CREDIT HOURS	18

Quarter 6	
SSCI XXX Social Sciences 100, 101, 102, 104, or 105	5
MECH 240 Machine Tools	4
EMEC 260 Electro-Mech. Controls II	4
MECH 260 Basic Mechanisms	4
TOTAL CREDIT HOURS	17
TOTAL DEGREE CREDIT HOURS	104

Electronic Engineering Technology

Electronic Engineering Technology Associate Degree Computer Electronics Major

Columbus State's six-quarter associate degree program in Electronic Engineering Technology prepares students to read and interpret complex instructions, engineering drawings, reports, technical literature, and to solve a variety of involved problems. Students will learn to use the language of electronics to communicate clearly with engineers, scientists, and skilled trade workers. Coursework includes electronic drafting, devices, and fabrication; algebra and calculus; and labs in direct and alternating current, electronic devices, digital devices, and microprocessors. Students may also qualify for work-study cooperative experiences with local industry.

Electronic Engineering Technologists are in demand in a diverse range of fields—from biomedicine to manufacturing—and a variety of activities—from computer repair to telecommunications, and from fiber optics to robotics. Graduates receive more than just a good paying job, they have the satisfaction of knowing the work they do provides a product or service which improves the quality of life of those who use it.

Columbus State's Electronic Engineering Technology program is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC of ABET). For further information regarding accreditation, contact: Accreditation Director for Engineering Technology, Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202.

Graduates who wish to continue their education may transfer their associate degree credits to a number of four-year institutions that offer baccalaureate degrees in engineering technology.

Electronic Engineering Technology shares related coursework with the Electro-Mechanical Engineering and Quality Assurance Technologies. For additional information refer to those sections of the Catalog.

Computer Electronics Major

Students interested in combining electronics with computer programming should consider the Computer Electronics major. This program enables the student to enroll in courses on how to use computers as well as on the electronics of the computer. Please contact the chairperson of either the Electronic Engineering Technology or Computer Information Technology programs for more information.

In addition to the general Electronic Engineering Technology competencies, a graduate majoring in Computer Electronics will be able to:

- Write, debug, test, maintain and document programs in Assembly, and C++ language programs.

- Write Job Control Language (JCL) necessary to execute typical business applications on an IBM mainframe computer using DOS/VSE.
- Use a terminal in an online environment (ADR/VOLLIE).
- Use word processing, spreadsheet, and graphic software available for the IBM PC and local area networks.
- Use flowcharting.

Specific Program Admission Information

Listed below are additional requirements for admission to the Computer Electronics major.

Complete CIT 101 – PC Applications I or equivalent approved by the chairperson of Computer Information Technology.

Electronic Engineering Technology Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
ENGT 100	Introduction to Engineering Technology .....3
MATH 111	Tech Math I .....4
EET 111	Electronic Circuits I .....4
EET 112	Electronic Circuits I Lab .....2
TOTAL CREDIT HOURS	.....16
Quarter 2	
ENGL 102	Essay & Research .....3
MATH 112	Tech Math 2 .....4
EET 120	Electronic Circuits II .....4
EET 121	Electronic Circuits II Lab .....2
EET 132	Digital Electronics I .....3
TOTAL CREDIT HOURS	.....16
Quarter 3	
ENGL 204	Technical Writing .....3
EET 130	Electronic Devices I .....4
EET 131	Electronic Devices I Lab .....2
EET 144	PC Hardware .....3
PHYS 117	College Physics (Mechanics and Heat) .....5
TOTAL CREDIT HOURS	.....17
Quarter 4	
EET 146	Computer Network Communications .....3
EET 243	Digital Electronics II .....4
EET 244	Digital Electronics II Lab .....2
COMM 105	Speech .....3
PHYS 118	College Physics (Electricity, Magnetism, and Light) .....5
TOTAL CREDIT HOURS	.....17
Quarter 5	
EET 241	Electronic Devices II .....4
EET 242	Electronic Devices II Lab .....2
EET 252	Microprocessors .....4
EET 253	Microprocessors Lab .....2
EET 255	Instrumentation and Controls .....3
TOTAL CREDIT HOURS	.....15
Quarter 6	
HUM XXX	Humanities 111,112,113,151, 152 or 224 .....5
EET 260	Capstone Experience .....4
SSCI XXX	Social Science 100,101, 102, 104, or 105 .....5
EET 110	Electronic Drafting .....2
EET 154	Electronic Fabrication .....2
TOTAL CREDIT HOURS	.....18
TOTAL DEGREE CREDIT HOURS	.....99

Computer Electronics Major

COURSE		CR
Quarter 1		
MATH 111	Technical Math I	4
ENGL 101	Beginning Composition	3
ENGT 100	Introduction to Engineering Technology	3
EET 111	Electronic Circuits I	4
EET 112	Electronic Circuits I Lab	2
TOTAL CREDIT HOURS		16
Quarter 2		
MATH 112	Tech Math 2	4
EET 120	Electronic Circuits II	4
EET 121	Electronic Circuits II Lab	2
ENGL 102	Essay & Research	3
EET 132	Digital Electronics I	3
TOTAL CREDIT HOURS		16
Quarter 3		
EET 130	Electronic Devices I	4
EET 131	Electronic Devices I Lab	2
ENGL 204	Technical Writing	3
EET 144	PC Hardware	3
COMM 105	Speech	3
CIT101	PC Applications 1	3
TOTAL CREDIT HOURS		18
Quarter 4		
EET 146	Computer Network Communications Systems	3
EET 243	Digital Electronics II	4
EET 244	Digital Electronics II Lab	2
EET 154	Electronic Fabrication	2
PHYS 117	College Physics (Mechanics and Heat)	5
CIT 103	Computer Concepts	3
TOTAL CREDIT HOURS		19
Quarter 5		
EET 241	Electronic Devices II	4
EET 242	Electronic Devices II Lab	2
EET 252	Microprocessors	4
EET 253	Microprocessors Lab	2
CIT 291	Special Topics in CIT	5
TOTAL CREDIT HOURS		17
Quarter 6		
EET 260	Capstone Experience	4
CIT 121	PC Operating Systems	3
HUM XXX	Humanities 111,112,113,151, or 224	5
SSCI XXX	Social Science 100, 101, 102, 104, or 105	5
MECH 252	Computer Programming for Technicians	3
TOTAL CREDIT HOURS		20
TOTAL DEGREE CREDIT HOURS		106

Emergency Medical Services

Emergency Medical Services Associate Degree

EMT–Basic Certificate

EMT–Intermediate Certificate (on hold)

EMT–Paramedic Certificate

Emergency Medical Technicians work under the direction of a physician to act as the primary pre-hospital care provider in the health care system. They must first make a comprehensive evaluation of the patient's condition and the overall situation. They may then need to provide immediate life-saving care. Technicians must demonstrate a high degree of technical skill, calmness, and professionalism, even under the most adverse conditions.

Columbus State's associate degree program in Emergency Medical Services exposes students to a wide variety of victim care situations, including direct patient care in local hospitals and on emergency vehicles. Instructors are highly experienced and active in the field of emergency medicine.

In addition to the associate degree, the Emergency Medical Services program offers the EMT–Basic Certificate, the EMT–Intermediate Certificate and the EMT–Paramedic Certificate accredited by the Ohio Department of Public Safety, Division of EMS (certificate # 311). The EMT-Paramedic Certificate program is also nationally accredited through the Committee on Accreditation of Educational Programs for the EMS Professions. For information on additional certificates, see the Emergency Medical Services Technology Coordinator.

Students in the EMT–Basic Certificate program must first complete the EMT–Basic course, and then pass the State/National EMT-B Certification written and practical exams. By state law, a student must be a certified EMT–Basic before enrolling in the EMT–Intermediate or the EMT–Paramedic Certificate programs. In addition to the above, to be eligible for admission into the Paramedic Certificate program students must also complete a prerequisite course EMS 201 (Paramedic Preparation Course) and a pre-testing process, which includes the Health Occupations Basic Entrance Test (HOBET).

Good mental and physical health is critical in emergency medical services. Students must have a physical examination and must meet program health requirements before they may participate in clinical laboratory experiences. Because students and workers in the health care field may be exposed to infectious materials and communicable diseases, the program emphasizes safety and prevention. In addition, all students must be covered by EMT-student liability insurance while enrolled in the certificate courses. To meet clinical affiliation agreement requirements, students in the Intermediate and Paramedic Certificate programs must successfully complete a BCI&I background check and a SAM-5 drug screen.

Upon completion of the associate degree requirements in Emergency Medical Services Technology, the graduate will be able to:

- Perform all of the duties included in EMT–Basic and EMT–Paramedic training, after successfully completing State of Ohio/National certification exams in these two areas.

- Demonstrate knowledge of the legal aspects of emergency medical service.
- Prepare for and deal with disasters, including those involving hazardous materials.
- Explain the complexity of emergency medical service.

EMT–Basic Certificate

Students completing the EMT–Basic Certificate will be able to:

- Meet State of Ohio/National requirements to take the EMT–Basic certification examination.
- Evaluate the nature and seriousness of a patient's condition or the state of the patient's injuries and assess requirements for emergency care.
- Administer appropriate emergency care to stabilize the patient's condition, including tracheal intubation and automated external defibrillation.
- Lift, move, position, and otherwise handle the patient in such a way as to minimize discomfort and further injury.

EMT–Intermediate Certificate (on hold)

Students completing the EMT–Intermediate Certificate will be able to:

- Meet State of Ohio/National requirements to take the EMT–Intermediate certification examination.
- Perform all duties of an EMT–Basic.
- Initiate appropriate intravenous procedures as specifically authorized by medical authority.

EMT–Paramedic Certificate

Students completing the EMT–Paramedic Certificate will be able to:

- Meet State of Ohio/National requirements to take the EMT–Paramedic certification examination.
- Perform all duties of the EMT–Basic.
- Initiate appropriate intravenous procedures as specifically authorized by medical authority.
- Initiate and continue emergency medical care under medical control, including recognizing presenting conditions and initiating appropriate invasive and noninvasive therapies (e.g., surgical and medical emergencies, airway and respiratory problems, cardiac dysrhythmias, cardio pulmonary arrest, and psychological crisis), and assessing the response of the patient to that therapy.

For information on additional certificates see the Emergency Medical Services Technology Coordinator.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Emergency Medical Services Technology.

- High school graduate or GED equivalency
- 18 years of age or older (contact EMS Coordinator)
- Completed health record required PRIOR TO registration
- COMPASS placement Into ENG 100 OR completion of equivalent course as verified on CSCC transcript.

Emergency Medical Services Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
XXXX XXX Basic Science Elective	3
MATH 102 Beginning Algebra I	4
EMS 110 EMT–Basic	9.5
TOTAL CREDIT HOURS	19.5

Quarter 2	
BIO 115 General Microbiology	5
ENGL 102 Essay & Research	3
COMM 105 Speech	3
EMS 123 Emergency Psych. Intervention	3
TOTAL CREDIT HOURS	14

Quarter 3	
ENGL 200 Business Communications	3
EMS 125 Disaster Aid	3
BIO 161 Human Anatomy	5
BIO 169 Human Physiology	5
TOTAL CREDIT HOURS	16

Quarter 4	
EMS 211 EMT-P I	7
EMS 281 Hospital Clinical I	2
EMS 291 Field Clinical I	1
EMS 128 Intro to Rescue for the EMS Provider.....	3
EMS 127 Handling Hazardous Material Situations	2
EMS XXX Technical Elective	2
TOTAL CREDIT HOURS	17

Quarter 5	
EMS 212 EMT-P II	7
EMS 282 Hospital Clinical II	2
EMS 292 Field Clinical II	1
EMS 121 EMS Systems	3
EMS 122 Legal Principles for the EMT	2
TOTAL CREDIT HOURS	15

Quarter 6	
EMS 213 EMT-P III	6
EMS 283 Hospital Clinical III	2
EMS 293 Field Clinical III	2
SSCI 10X Social Science 100, 101, 102, 104, or 105	5
TOTAL CREDIT HOURS	15

Quarter 7	
EMS 214 EMT-P IV	4
EMS 284 Hospital Clinical IV	2
EMS 294 Field Clinical IV	2
HUM XXX Humanities 111, 112, 113, 151, 152 or 224	5
TOTAL CREDIT HOURS	13
TOTAL DEGREE CREDIT HOURS	109.5

Technical Elective must be selected from the following list of courses:

EMS 130 River Rescue	3
EMS 131 Special Topics For EMT	3
EMS 132 EMS Dispatcher	2
EMS 133 Ice & Cold Water Rescue	2
EMS 142 Vertical Rescue	2
EMS 143 Search and Rescue	2
EMS 144 Confined Space Rescue	2
EMS 265 12-lead EKG Interpretation & Advanced Cardiac Treatment	3
EMS 275 Critical Care Transport	7
EMS 201 Paramedic Preparation Course	4
EMS 111 EMT-Intermediate	1

EMT–Basic Certificate

COURSE	CR
EMS 110 EMT–Basic	9.5
TOTAL CERTIFICATE CREDIT HOURS	9.5

EMT-Intermediate Certificate (on hold)

COURSE	CR
EMS 111 EMT–Intermediate	11
TOTAL CERTIFICATE CREDIT HOURS	11

EMT–Paramedic Certificate

COURSE	CR
Quarter 1	
EMS 211 EMT–P I	7
EMS 281 Hospital Clinical I	2
EMS 291 Field Clinical I	1
TOTAL CREDIT HOURS	10

Quarter 2	
EMS 212 EMT–P II	7
EMS 282 Hospital Clinical II	2
EMS 292 Field Clinical II	1
TOTAL CREDIT HOURS	10

Quarter 3	
EMS 213 EMT–P III	6
EMS 283 Hospital Clinical III	2
EMS 293 Field Clinical III	2
TOTAL CREDIT HOURS	10

Quarter 4	
EMS 214 EMT–P IV	4
MS 284 Hospital Clinical IV	2
EMS 294 Field Clinical IV	2
TOTAL CREDIT HOURS	8
TOTAL CERTIFICATE CREDIT HOURS	38

Emergency Medical Service/ Fire Science

Associate of Technical Studies degree

In many areas, emergency medical services are provided through the fire service agencies. This unique Associate of Technical Studies degree provides the student with the opportunity to combine these two programs into a degree with specific preparation for entering or advancing in such agencies.

The Associate of Technical Studies degree offers the EMT–Basic Certificate and the EMT–Paramedic Certificate accredited by the Ohio Department of Public Safety, Division of EMS (certificate # 311). The EMT–Paramedic Certificate is also nationally accredited through the Committee on Accreditation of Educational Programs for the EMS Professions.

Students must first complete the EMT–Basic course and then pass the State/National EMT–B Certificate written and practical exams. By state law a student must be certified as an Ohio EMT–Basic before enrolling in the EMT–Paramedic Certificate program. In addition to EMT–Basic certification as above, students must also complete EMS 201 (Paramedic Preparation Course) as a prerequisite and a pretesting process, which includes the Health Occupations Basic Entrance Test (HOBET).

Good mental and physical health is critical in emergency services; therefore students must have a physical examination, meet the program health requirements and be covered by the EMT-student liability insurance. To meet clinical affiliation agreement requirements, students in the Intermediate and Paramedic courses must successfully complete a BCI&I background check and SAM-5 drug screen.

Upon completion of the Associate of Technical Studies in Emergency Medical/Fire Science, the graduate will be able to:

- Demonstrate effective communication and interpersonal skills with supervisors, peers and the public.
- Perform all duties and responsibilities of the EMT–Basic and EMT–Paramedic, after successfully achieving certification in these areas.
- Explain the history and basic principles of the fire service.
- Recognize and respond to changing fire conditions and potential for collapse in structures.
- Demonstrate the duties and responsibilities of Incident Command.
- Demonstrate knowledge of the legal aspects of the fire service and emergency medical service.
- Demonstrate necessary proficiencies with extinguishment hydraulics and fire protection systems.
- Demonstrate a working knowledge of fire investigation principles.

For student outcomes for EMT–Basic Certificate and EMT–Paramedic Certificate see Emergency Medical Services.

NOTE: If you currently have EMT–Basic, Paramedic, Firefighter I & II and/or Apprenticeship certification, you may qualify for nontraditional credit which may apply toward the degree. Contact the EMS or Fire Science Technology Coordinator to determine your individual status.

Emergency Medical Service/Fire Science (Associate of Technical Studies Degree)

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
MATH 102 Beginning Algebra	4
EMS 110 EMT Basic	9.5
TOTAL CREDIT HOURS	16.5

Quarter 2	
ENGL 102 Essay & Research	3
CHEM 100 Intro to Chemistry	4
FIRE XXX Fire Elective	3
COMM 105 Speech	3
TOTAL CREDIT HOURS	13

Quarter 3	
ENGL 200 Business Communications	3
LAW 268 Hazardous Materials	3
CIT 101 PC Applications 1	3
FIRE XXX Fire Elective	3
FIRE XXX Fire Elective	3
LAW 266 High Rise Safety	2
TOTAL CREDIT HOURS	17

Quarter 4	
PSY 100 Intro to Psychology	5
EMS 211 EMT-P I	7
EMS 281 Hospital Clinical	2
EMS 291 Field Clinical	1
TOTAL CREDIT HOURS	15

Quarter 5	
HUM XXX Humanities 111, 112, 113, 151, 152 or 224	5
EMS 212 EMT-P II	7
EMS 282 Hospital Clinical II	2
EMS 292 Field Clinical II	1
TOTAL CREDIT HOURS	15

Quarter 6	
FIRE xxx Fire Technical Elective	3
FIRE xxx Fire Technical Elective	3
EMS 213 EMT-P III	6
EMS 283 Hospital Clinical III	2
EMS 293 Field Clinical III	2
TOTAL CREDIT HOURS	16

Quarter 7	
SSCI XXX Social Science 100, 101, 102, 104, 105	5
FIRE XXX Fire Elective	3
EMS 214 EMT-P IV	4
EMS 284 Hospital Clinical IV	2
EMS 294 Field Clinical IV	2
TOTAL CREDIT HOURS	16
TOTAL DEGREE CREDIT HOURS	108.5

***Technical Electives (FIRE) must be selected from the following:**

FIRE 100 Introduction to Firefighting	3
FIRE 102 Fire Inspector I (Prevention Practices)	3
FIRE 104 Fire Investigation Methods	4
FIRE 106 Protection Systems	3
FIRE 108 Fire Fighting Command I	4
FIRE 109 Fire Fighting Command II	3
FIRE 116 Personnel Training Methods	3
FIRE 117 Firefighter I & II	12
FIRE 151 Fire Inspector II (Fire Prevention Codes)	4
FIRE 153 Fire Hydraulics	4
FIRE 202 Hazardous Materials II	4

FIRE 203 Legal Aspects of Fire Protection	3
FIRE 204 Fire Service Rating System (Fire Insurance)	2
FIRE 205 Fire Service Company Officer	3
FIRE 206 Administration of a Fire Department	3
FIRE 207 Customer Services for the Fire Services	3
FIRE 210 Construction/Collapse for Fire Rescue	3
CMGT 121 Building Construction Drawings	3
EMS 201 Paramedic Preparation	4

NOTE: PRIOR TO ENROLLING in any Fire Science courses, you must have completed ONE of the following: FIRE 100, FIRE 117, OR have documented Firefighter I & II certification.

Engineering Technologies

*Individual technology degree programs are listed alphabetically in the Programs of Study section. See:

- Aviation Maintenance Technology**
- Electro-Mechanical Engineering Technology**
- Electronic Engineering Technology**
- Mechanical Engineering Technology**
- Quality Assurance Technology**

Certificate Programs:

- Engineering Assembly Technician**
- Engineering Technician**
- Manufacturing Maintenance Technician**
- Computer Aided Drafting Technician**

Engineering Technologies offers four focused certificates (see above) that lead to employment opportunities in technology areas. The certificate coursework and preparation means that the student can be gainfully employed earlier, and, in many instances, with companies that offer tuition reimbursement. These certificates can be combined and count toward an associates degree.

The Engineering Technologies Department, located in 312 Eibling Hall and at Bolton Field, is offering a new course, "Introduction to Engineering Technology." It presents an overview of program offerings at Columbus State and the types of jobs that engineering technologists and technicians can expect.

ENGT 100 Introduction to Engineering Technology

This course is designed to introduce the beginning student to Engineering Technologies at Columbus State. The student will complete exploratory assignments in Mechanical Engineering Technology, Electro-Mechanical Engineering Technology, and Electronic Engineering Technology and receive an overview of the jobs engineering technologists and technicians have and the industries involved. Students will participate in engineer interviews and plant tours. Additional topics covered include the industrial revolution, manufacturing and electronics in today's global market, the future of manufacturing and electronics, and Steven Covey's "Seven Habits of Highly Effective People".

Engineering Assembly Technician Certificate

Assemblers and fabricators play an important role in the manufacturing process. They are responsible for putting together finished and semi-finished goods, assembling the pieces of components of a product, and joining the components into a whole product.

Assemblers begin by reading detailed schematics or blueprints that show how to assemble complex machines. After determining how parts should connect, they often need to use hand or power tools to trim, shim, cut, and make other adjustments to make components fit together and align properly. Once the parts are properly aligned, they connect parts with bolts and screws or by welding or soldering

pieces together. Careful quality control is important throughout the assembly process, so assemblers look for both mistakes in the assembly process and faulty components. They try to help fix problems before more defective products are produced.

Changes in technology have transformed the manufacturing and assembly process. Automated manufacturing systems now use robots, computers, programmable motion control devices, and various sensing technologies. These systems change the way in which goods are made and affect the jobs of those who make them. The more advanced assemblers must be able to work with these new technologies and be comfortable using them to produce goods.

COURSE

Quarter 1

ENGT 100	Introduction to Engineering Technology	3
MECH 240	Machine Tools.....	4
EET 110	Electronic Drafting.....	2
MECH 112	Computer Applications in Manufacturing	3
TOTAL CREDIT HOURS		12

Quarter 2

EET 103	Investigating Electricity	3
QUAL 150	Quality Transformation	4
EET 154	Electronic Fabrication.....	2
MECH 120	Mechanical Drafting I.....	3
TOTAL CREDIT HOURS		12
TOTAL CERTIFICATE CREDIT HOURS		24

Engineering Technician Certificate

Engineering Technicians use application-oriented principles of science, engineering, and mathematics to solve technical problems in research & development and manufacturing. Their work is more limited in scope than that of scientists and engineers. Many engineering technicians assist engineers and scientists, especially in research and development. Others work in quality control, inspecting products and processes, conducting tests, or collecting data. In manufacturing, they may assist in product design, development, or production. Although many workers who repair or maintain various types of electrical, electronic, or mechanical equipment are called technicians, those interested in repair and maintenance should refer to the Manufacturing Maintenance Technician Certificate.

COURSE

Quarter 1

ENGT 100	Introduction to Engineering Technology	3
MECH 111	Manufacturing Processes	4
MECH 112	Computer Applications in Manufacturing	3
EET 110	Electronic Drafting.....	2
TOTAL CREDIT HOURS		12

Quarter 2

EET 103	Investigating Electricity.....	3
MECH 120	Mechanical Drafting I.....	3
EET 154	Electronic Fabrication.....	2
MECH 240	Machine Tools.....	4
TOTAL CREDIT HOURS		12

Quarter 3

EET 111	Electronic Circuits I.....	4
EET 112	Electronic Circuits I Lab.....	2
MECH 131	Hydraulics.....	3
MATH 111	Technical Mathematics I.....	4
TOTAL CREDIT HOURS		13

Quarter 4	
EET 120	Electronic Circuits II.....4
EET 121	Electronic Circuits II Lab.....2
EET 132	Digital Electronics I.....3
MATH 112	Technical Mathematics II.....4
TOTAL CREDIT HOURS	.....13
TOTAL CERTIFICATE CREDIT HOURS	.....50

Manufacturing Maintenance Technician Certificate

Electrical equipment and electronic equipment are two distinct types of industrial equipment, although much equipment contains both electrical and electronic components. In general, electrical portions provide the power for the equipment, while electronic components control the device, although many types of equipment still are controlled with electrical devices. Electronic sensors monitor the equipment and the manufacturing process, providing feedback to the programmable logic control (PLC), which controls the equipment. The PLC processes the information provided by the sensors and makes adjustments to optimize output. To adjust the output, the PLC sends signals to the electrical, hydraulic, and pneumatic devices that power the machine—changing feed rates, pressures, and other variables in the manufacturing process. Many installers and repairers, known as field technicians, travel to factories or other locations to repair equipment. These workers often have assigned areas in which they perform preventive maintenance on a regular basis. When equipment breaks down, field technicians go to a customer’s site to repair the equipment. Bench technicians work in repair shops located in factories and service centers, fixing components that cannot be repaired on the factory floor.

COURSE	
Quarter 1	
EET 111	Electronic Circuits I.....4
EET 112	Electronic Circuits I Lab.....2
MATH 111	Technical Mathematics I.....4
MECH 112	Computer Applications in Manufacturing.....3
TOTAL CREDIT HOURS	.....13
Quarter 2	
EET 120	Electronic Circuits II.....4
EET 121	Electronic Circuits II Lab.....2
EMEC 250	Motors and Controls.....3
MATH 112	Technical Mathematics II.....4
TOTAL CREDIT HOURS	.....13
Quarter 3	
EET 130	Electronic Devices I.....4
EET 131	Electronic Devices I Lab.....2
MECH 131	Hydraulics.....3
EMECH 251	Electro-Mechanical Controls I.....4
TOTAL CREDIT HOURS	.....13
Quarter 4	
EMEC 260	Electro-Mechanical Controls II.....3
EET 132	Digital Electronics I.....3
MECH 243	Robotics.....3
EET 255	Instrumentation & Controls.....3
TOTAL CREDIT HOURS	.....12
TOTAL CERTIFICATE CREDIT HOURS	.....51

Computer Aided Drafting Technician Certificate

Drafters prepare technical drawings and plans used by production workers to build manufactured products. Drafters’ drawings provide visual guidelines, show the technical details of the products, and specify dimensions, materials, and procedures. Drafters fill in technical details using drawings, rough sketches, specifications, codes, and calculations previously made by engineers or scientists. Some use their knowledge of engineering and manufacturing theory and standards to draw the parts of a machine to determine design elements. Drafters use technical handbooks, tables, calculators, and computers to complete their work.

Traditionally, drafters sat at drawing boards and used pencils, pens, compasses, protractors, triangles, and other drafting devices to prepare a drawing manually. Most drafters now use Computer Aided Drafting and Design (CADD) systems to prepare drawings. Consequently, some drafters may be referred to as CADD operators. CADD systems employ computers to create and store drawings electronically that can then be viewed, printed, or programmed directly into automated manufacturing systems. These systems also permit drafters to vary designs quickly. Although CADD is used extensively, it is only a tool. Persons who produce technical drawings with CADD still function as drafters and need the knowledge of traditional drafters, in addition to CADD skills. Despite the nearly universal use of CADD systems, manual drafting and sketching still are used in certain applications.

COURSE	
Quarter 1	
ENGT 100	Introduction to Engineering Technology.....3
MECH 112	Computer Applications in Manufacturing.....3
TOTAL CREDIT HOURS	.....6
Quarter 2	
EET 110	Electronic Drafting.....2
MECH 120	Mechanical Drafting I.....3
TOTAL CREDIT HOURS	.....5
Quarter 3	
MECH 251	Computer Aided Drafting I.....3
TOTAL CREDIT HOURS	.....3
Quarter 4	
MECH 262	Computer Aided Drafting II.....3
TOTAL CREDIT HOURS	.....3
Quarter 5	
MECH 264	Computer Aided Drafting III.....3
TOTAL CREDIT HOURS	.....3
TOTAL CERTIFICATE CREDIT HOURS	.....20

Environmental Science, Safety and Health

Environmental Science, Safety and Health Associate Degree Health & Safety Training for Hazardous Waste Operations Certificate Water/Wastewater Technology Certificate Occupational Health and Safety Certificate Sustainable Building Certificate

Environmental, Science, Safety, and Health Technicians work in a wide variety of entry-level positions for environmental engineering consulting firms, environmental laboratories, wastewater and water treatment facilities, lead and asbestos abatement contractors, manufacturing facilities, governmental agencies, and other organizations requiring individuals to work in environmentally or safety related positions. The demand for technicians capable of performing tasks such as sample collection, monitoring, data management, and instrumentation calibration, operation, and maintenance continues to increase. According to recent surveys and job placement rates, the job market for environmental technicians in central Ohio is very strong.

Columbus State's Associate Degree program in Environmental Science, Safety and Health has a diverse curriculum, which includes many basic science courses, as well as courses offered by other engineering technologies. This curriculum provides students with a strong foundation of technical skills necessary for careers in the environmental industry. A summer quarter internship program also offers students hands-on experience in a real work setting.

In addition to providing environmental technicians with entry-level training, the degree provides opportunities for individuals seeking career changes, continuing education, and skills enhancement.

The Water/Wastewater Technology Certificate is designed to serve the educational needs of employees that work in water and/or wastewater treatment, such as those who work for municipalities or industry. This certificate will also provide a strong educational foundation for those students who have an interest in entering an occupation in water or wastewater treatment. Individuals who complete the coursework in this program will be much better prepared to take the state water or wastewater treatment operator's exams. Most courses in this certificate will also apply towards the Associate of Applied Science Degree in either Environmental Science, Safety and Health or Civil Engineering Technology.

The Occupational Health and Safety Certificate is designed to provide basic supervisory and regulatory skills to those who have, or may wish to have, a job responsible for the health and safety of the employees in the workplace.

Sustainable Building Certificate is designed to provide information on sustainable buildings to students of the Construction Sci-

ences Department and to provide training opportunity for current professionals such as architects, building managers, construction managers, and others.

For additional information on the Health and Safety Training for Hazardous Waste Operations Certificate, or other OSHA training opportunities, see the Environmental Science, Safety and Health Advisor.

Upon completion of the Associate Degree in Environmental Science, Safety and Health, the graduate will be able to:

- Collect air, water, waste, and soil samples for routine monitoring as required by regulatory agencies and for operational control of remediation or treatment systems.
- Conduct field investigations using environmental instrumentation.
- Assist in the operation and maintenance of systems used to control pollution, remediate contaminated materials, or treat water as required by environmental laws.
- Perform duties related to the management, treatment, storage, disposal, and emergency response to spills of hazardous materials and toxic substances in accordance with EPA, OSHA and DOT.
- Collect and compile data necessary for an environmental site assessment.
- Utilize basic concepts of geology, hydrology, chemistry, and biology in the investigation of the occurrence, transport, and remediation of environmental contaminants.
- Demonstrate a knowledge of solid and hazardous waste management practices, including being able to evaluate hazardous waste data to provide information for compliance with environmental standards.
- Apply basic risk assessment and toxic substances exposure analysis techniques.
- Understand duties requiring knowledge of OSHA regulations in the workplace, including hygiene applications.

Environmental Science, Safety and Health Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
ENVR 101	Introduction to Environmental Science, Safety & Health .....3
ENVR 158	Environmental Site Assessment .....3
MATH 148	College Algebra .....5
BIO 111	Introductory Biology I .....5
TOTAL CREDIT HOURS	.....19
Quarter 2	
ENGL 102	Essay & Research .....3
ENVR 110	Industrial/Municipal Pollution Control .....3
CIT 101	PC Applications I .....3
ENVR 130	Environmental Laws and Regulations .....5
GEOL 101	Earth Systems I or GEOL 121 Physical Geology .....5
TOTAL CREDIT HOURS	.....19
Quarter 3	
CHEM 111	Elementary Chemistry I .....5
ENVR 111	Hazardous Materials Management .....3
ENVR 120	Environmental Aspects of Soils .....5
ENVR 224	Environmental Hydrology .....3
TOTAL CREDIT HOURS	.....16

Summer Quarter (between 1st and 2nd year)

ENVR 252	Health & Safety Training for Hazardous Waste Operations.....	3
TOTAL CREDIT HOURS		3

Quarter 4

ENVR 170	General Industry Safety and Health.....	4
MATH 135	Elementary Statistics.....	5
ENVR 250	Environmental Sampling.....	5
ENGL 204	Technical Writing.....	3
TOTAL CREDIT HOURS		17

Quarter 5

ENVR 253	Environmental Systems Analysis.....	3
COMM 110	Conference & Group Discussion.....	3
SSCI 104	Human Economic Geography.....	5
ENVR 222	Water Treatment Techniques or ENVR 223 Wastewater Treatment Techniques.....	3
ENVR 255	Air Pollution & Monitoring.....	3
TOTAL CREDIT HOURS		17

Quarter 6

ENVR 254	Subsurface Restoration Techniques.....	5
HUM 152	American Civilization II recommended or Humanities 111,112,113, 151, or 224.....	5
XXX XXX	Technical Elective.....	3
XXX XXX	Technical Elective.....	4
TOTAL CREDIT HOURS		17
TOTAL DEGREE CREDIT HOURS		108

Technical elective must be selected from the following list of courses:

SPECIALIZATION TRACKS

ENVR Specialization

ENVR 220	Environmental Chemistry.....	5
ENVR 256	Hazardous Materials Refresher Training.....	1
ENVR 282	Sustainable Building Strategies.....	3
ENVR 283	Ecological Residential Construction.....	3
ENVR 291	Field Experience.....	3
ENVR 299	Special Topics on Environmental Science, Safety & Health ...1-5	1-5

Safety & Health Specialization

ENVR 275	Industrial Hygiene.....	4
ENVR 160	OSHA 10-Hr Construction Safety & Health.....	1
ENVR 265	OSHA 30-Hr Construction Safety & Health.....	4

Water & Wastewater Specialization

CIVL 221	Elementary Hydraulics.....	3
CIVL 223	Public Utility Systems.....	3

Field/Support Services Specialization

SURV 141	Basic Surveying or SURV 140 Surveying and GPS.....	4
ARCH 110	Construction Drafting – Manual I.....	2
ARCH 112	Construction Drafting – CAD I.....	2
GEOG 207	Introduction to Geographic Information Systems.....	5

Health & Safety Training for Hazardous Waste Operations Certificate

COURSE		CR
Quarter 1		
ENVR 252	Health & Safety Training for Hazardous Waste Operation.....	3
TOTAL CERTIFICATE CREDIT HOURS		3

Water/Wastewater Technology Certificate

COURSE		CR
Quarter 1		
CHEM 111	Elementary Chemistry I.....	5
ENGL 101	Beginning Composition.....	3
ENVR 101	Introduction to Environmental Science, Safety & Health.....	3
MATH 104	Intermediate Algebra.....	5
TOTAL CREDIT HOURS		16

Quarter 2

CIVL 221	Elementary Hydraulics.....	3
ENVR 110	Industrial Pollution Control.....	3
CIT 101	P.C. Applications I.....	3
ENVR 252	Health & Safety Training for Hazardous Waste Operations or CMGT 135 Safety and Loss Prevention.....	3
TOTAL CREDIT HOURS		12

Quarter 3

CIVL 223	Public Utility Systems.....	3
ENVR 222	Water Treatment Techniques.....	3
ENVR 223	Wastewater Treatment Techniques.....	3
ENVR 224	Environmental Hydrology.....	3
ENVR 253	Environmental Systems Analysis.....	3
TOTAL CREDIT HOURS		15
TOTAL CERTIFICATE CREDIT HOURS		43

Occupational Health and Safety Certificate

COURSE		CR
Quarter 1		
ENVR 101	Introduction to Environmental Science, Safety & Health.....	3
ENVR 111	Hazardous Materials Management.....	3
TOTAL CREDIT HOURS		6

Quarter 2

ENVR 160	OSHA 10-Hr Construction Safety & Health.....	1
ENVR 170	General Industry Safety and Health.....	4
TOTAL CREDIT HOURS		5

Quarter 3

ENVR 252	Health & Safety Training for Hazardous Waste Operation.....	3
ENVR 275	Industrial Hygiene.....	4
TOTAL CREDIT HOURS		7
TOTAL CERTIFICATE CREDIT HOURS		18

Sustainable Building Certificate

COURSE		CR
Autumn Quarter		
ENVR 282	Sustainable Building Strategies.....	3
TOTAL CREDIT HOURS		3

Winter Quarter

CMGT 282	Sustainable Construction.....	3
TOTAL CREDIT HOURS		3

Spring Quarter

ARCH 282	Sustainable Design Strategies.....	3
TOTAL CREDIT HOURS		3

Summer Quarter

ARCH 283	Sustainable Energy Performance.....	3
TOTAL CREDIT HOURS		3
TOTAL CERTIFICATE CREDIT HOURS		12

Finance

Finance Associate Degree

Today's banking, consumer credit, and commercial credit industries offer outstanding career opportunities for community college graduates. The associate degree program in Finance gives students the knowledge and skills they need to succeed in entry-level and management training positions. These may be in finance departments of corporations, government agencies, and departments of banks, savings and loans, mortgage companies, and insurance companies. Examples of these positions include loan processor, loan officer, mortgage banking trainee, credit analyst, insurance analyst, financial planner, collections manager, stockbroker trainee, and financial analyst.

Upon completion of the Associate Degree in Finance, the graduate will be able to:

- Explain the key concepts of financial transactions in the macro-economy.
- Explain operational methods of various financial institutions.
- Demonstrate an understanding of both commercial and consumer credit. Plan credit investigations, analyze credit reports, make credit granting decisions, implement a general collection system, demonstrate an understanding of credit laws, and measure the efficiency of a credit department.
- Analyze financial statements and interpret the results of ratio analysis, and assess the risk/return trade-off.
- Analyze stocks, bonds, and mutual funds and the interrelationship between them. Explain the use of mutual funds to achieve diversification.
- Demonstrate a working knowledge of personal computers, analyze financial problems with spread sheet software, and research financial topics on the Internet.
- Apply capital budgeting techniques for valuing business investments.
- Write financial plans for business entities and individuals.
- Using many sources including the Internet to produce research reports on current topical issues relevant to financial markets.

Traditional Classes and Distance Learning Choices at Columbus State

The Finance program is proud to offer traditional and distance learning options for our students. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at our main campus and off-campus locations. Finance also offers distance learning courses that provide the same high quality learning as traditional instruction, yet with the flexibility of being able to complete your course work online or through video based instruction.

Finance Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
CIT 101	PC Application I.....3
BMGT 111	Management .....5
ACCT 106	Introduction to Accounting I.....5
TOTAL CREDIT HOURS	16
Quarter 2	
ENGL 102	Essay & Research .....3
MATH 103	Beginning Algebra II .....4
ACCT 107	Introduction to Accounting II.....5
FMGT 221	Financial Institutions and Markets .....4
FMGT 101	Personal Finance .....4
TOTAL CREDIT HOURS	20
Quarter 3	
HUM xxx	Humanities 111,112,113,151, 152 or 224 .....5
FMGT 201	Corporate Finance .....5
ENGL 200	Business Communications .....3
ECON 200	Principles of Microeconomics .....5
TOTAL CREDIT HOURS	18
Quarter 4	
MATH 135	Elementary Statistics.....5
LEGL 264	Legal Environment of Business .....4
FMGT 202	Money & Banking .....5
XXX XXX	Approved Elective .....3
TOTAL CREDIT HOURS	17
Quarter 5	
FMGT 211	Investments .....4
ACCT 222	Financial Statement Analysis II .....3
ECON 240	Principles of Macroeconomics .....5
MKTG 111	Marketing Principles .....5
TOTAL CREDIT HOURS	17
Quarter 6	
XXX XXX	Approved Elective .....5
FMGT 251	Finance Research .....2
NSCI 101	Natural Science I .....5
BMGT 271	Management Decisions .....2
COMM 105	Speech .....3
TOTAL CREDIT HOURS	17
TOTAL DEGREE CREDIT HOURS	105

The approved elective may be selected from courses in Math, Computer Information Technology, Accounting, Business Management, and Marketing. Discuss course options with faculty advisor.

Fire Science Associate Degree

Technological advancements and increasing sophistication in fire fighting and prevention have made the role of the professional in this field more complex, requiring advanced preparation. This program is designed for firefighters and persons in related fields such as construction engineering, insurance investigation, and corporate safety.

The program emphasizes fire-fighting techniques, fire prevention, fire protection systems, and customer service. Combining these subjects with advanced hazardous material response, building construction, and hydraulics gives the student a firm foundation in fire protection and prevention.

Upon completion of the Associate Degree in Fire Science, the graduate will be able to:

- Demonstrate effective communication and interpersonal skills with supervisors, peers and the public.
- Explain the history and basic principles of the fire service.
- Recognize and respond to changing fire conditions and potential for collapse in structures.
- Demonstrate knowledge of the legal aspects of the fire service.
- Demonstrate the duties and responsibilities of Incident Command.
- Demonstrate necessary proficiencies with extinguishment hydraulics and fire protection systems.
- Demonstrate a working knowledge of fire investigation principles.

Fire Science Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
MATH 102	Beginning Algebra .....4
FIRE 117	Firefighter I & II .....12
TOTAL CREDIT HOURS	.....19
Quarter 2	
ENGL 102	Essay & Research .....3
CHEM 100	Intro to Chemistry .....4
EMS 110	EMT – Basic .....8
FIRE 210	Construction/Collapse for Fire Rescue .....3
TOTAL CREDIT HOURS	.....18
Quarter 3	
ENGL 200	Business Communications .....3
LAW 268	Hazardous Materials .....3
SSCI XXX	Social Science 100, 101, 102,104, or 105 .....5
FIRE 207	Customer Service for the Fire Service .....3
TOTAL CREDIT HOURS	.....14
Quarter 4	
HUM XXX	Humanities 111,112,113,151, 152 or 224 .....5
FIRE 102	Fire Inspector .....3
CIT 101	PC Applications .....3
FIRE XXX	Technical Elective .....3
TOTAL CREDIT HOURS	.....14
Quarter 5	
COMM 105	Speech .....3
FIRE 106	Fire Protection Systems .....3

FIRE 204	Fire Service Rating System .....2
FIRE 209	Fire Fighting Problems .....3
TOTAL CREDIT HOURS	.....11

Quarter 6

FIRE 104	Fire Investigation Methods .....4
FIRE 108	Fire Command I .....4
FIRE 116	Personnel Training Methods .....3
FIRE 205	Fire Service Company Officer .....3
FIRE 202	Hazardous Materials (Technician Level) .....4
TOTAL CREDIT HOURS	.....18

Quarter 7

FIRE 109	Fire Command II .....3
FIRE 153	Fire Hydraulics .....4
FIRE 203	Fire Prevention-Legal Aspects .....3
FIRE 206	Administration of a Fire Department .....3
TOTAL CREDIT HOURS	.....13
TOTAL DEGREE CREDIT HOURS	.....107

Technical Electives:

FIRE 151	Fire Prevention Codes .....4
CMGT 121	Building Construction Drawings .....3

NOTE: PRIOR TO ENROLLING in any Fire Science courses, student must complete ONE of the following:

FIRE 100, FIRE 117, OR have documented Firefighter I & II certification.

Note: Students with EMT-Basic, Firefighter I & II and/or Apprenticeship certification may qualify for other nontraditional credit which may apply toward the degree. Contact the EMS or Fire Science Technology Coordinator to determine individual status.

Geographic Information Systems

Geographic Information Systems Associate Degree GIS Certificate

The Geographic Information Systems associate degree program provides the community with skilled professionals who use, edit, and make decisions using GIS systems. Graduates are able to work in diverse industries that use geographic information systems including government agencies, construction, banking, healthcare, land use planning, transportation mapping and analysis, and emergency response.

With the growth of decision-making using spatial data and geographic locations, many businesses are looking for individuals who have skills and knowledge in GIS. GIS professionals can analyze and match spatial data with geographic location, create maps and make decisions relevant to their industries. They use, edit and manipulate the GIS software in their day-to-day operations. GIS is expected to be a growth occupation in Ohio and the nation in the years to come.

The GIS Certificate program is designed for professionals seeking to enhance their knowledge and skills in Geographic Information Systems. It is most beneficial to entry and intermediate level GIS users who lack formal training and education in GIS. There are no prerequisites and no previous work experience in geographic

information technologies is required. The program is an evening and/or weekend program. Courses are taught as instructor-led or as Web-based instruction. Projects and assignments can be submitted using your own computer or lab facilities on campus.

The GIS program provides students with a solid educational background in communication skills, math, computer literacy and operations, and humanities and behavioral sciences.

Upon completion of the associate degree in GIS, the graduate will be able to:

- Recognize, evaluate, combine and use the different forms of data acquisitions which are used in GIS mapping including GPS, surveying, photogrammetry, scanning, digitizing and remote sensing.
- Create and formulate techniques for implementing a geographic information system by having the knowledge and skills in creating, editing, using and georeferencing spatial data and GIS softwares.
- Develop strategic, business, and implementation plans for GIS projects, budgeting, software and hardware procurement, staffing, training and legal issues.

GIS Associate Degree

COURSE	CR
Quarter 1	
GEOG 207 Introduction to GIS	5
GIS 100 Acquiring GIS Data	3
MATH 148 College Algebra	5
CIT 103 Computer Logic Fundamentals.....	3
TOTAL CREDIT HOURS	16
Quarter 2	
ENGL 101 Beginning Composition	3
GEOG 280 Elements of Cartography	5
GIS 110 Scanning and Digitizing (Second Term).....	2
GIS 105 Elements of Photogrammetry (First Term).....	2
GIS 251 GIS Software I	3
TOTAL CREDIT HOURS.....	15
Quarter 3	
ENGL 102 Essay and Research.....	3
MATH 135 Elementary Statistics.....	5
ARCH 112 Construction Drafting – CAD I.....	2
GIS 253 GIS Software II.....	3
HUM XXX Humanities 111, 112, 113, 151,152 or 224	5
TOTAL CREDIT HOURS	18
Quarter 4	
COMM 110 Conference and Group Discussion.....	3
ENGL 204 Technical Writing.....	3
CIT 233 Expert Access.....	3
SURV 140 Surveying and GPS.....	4
XXX XXX Technical Elective.....	3
TOTAL CREDIT HOURS	16
Quarter 5	
GIS 203 Remote Sensing of Environment.....	4
GIS 280 Advanced GIS Applications.....	4
SSCI 104 Human Economic Geography	5
XXX XXX Technical Elective	3
TOTAL CREDIT HOURS	16

Quarter 6	
GIS 130 Introduction of Spatial Analysis.....	4
GIS 291 GIS Practicum.....	4
GIS 290 Seminar for GIS.....	1
XXX XXX Technical Elective.....	3
TOTAL CREDIT HOURS	12
TOTAL DEGREE CREDIT HOURS	93

Technical Electives must be selected from the following list of courses:

SPECIALIZATION TRACKS

GIS Specialization

GIS 275 Planning and Implementing GIS.....	3
GIS 277 Introduction to ArcIMS.....	3
GIS 278 VBA Programming for GIS	3
GIS 279 Introduction to GIS Databases.....	3
GIS 281 Introduction to ArcGIS Server	3
GIS 283 GIS in Emergency Management.....	3
GIS 299 Special Topics in GIS.....	1-5

Environmental Specialization

ENVR 101 Introduction to Environmental Technology	3
ENVR 110 Industrial/Municipal Pollution Control.....	3
ENVR 158 Environmental Site Assessment.....	3

Landscape Specialization

LAND 152 Site Planning.....	4
LAND 110 Landscape Computer Application.....	4
SURV 247 Townsite and Urban Development.....	3

LIS Specialization

LAND 152 Site Planning.....	4
SURV 245 Survey Law	3
SURV 249 Land Subdivision Systems.....	3

GIS Certificate

COURSE	CR
Quarter 1	
GEOG 207 Introduction to GIS	5
GIS 100 Acquiring GIS Data*	3
TOTAL CREDIT HOURS	8
Quarter 2	
GIS 251 GIS Software I	3
XXX XXX Technical Elective ²	3
TOTAL CREDIT HOURS	6
Quarter 3	
GIS 253 GIS Software II.....	3
GIS 280 Advanced GIS Applications or	4
GIS 290/-291 Seminar for GIS /GIS Practicum* ¹	5
TOTAL CREDIT HOURS	7-8
TOTAL CERTIFICATE CREDIT HOURS	21-22

Technical Electives must be selected from the following list of courses:

GIS 275 Planning and Implementing GIS.....	3
GIS 277 Introduction to ArcIMS.....	3
GIS 278 VBA Programming for GIS	3
GIS 279 Introduction to GIS Databases.....	3
GIS 281 Introduction to ArcGIS Server	3
GIS 283 GIS in Emergency Management.....	3

* This course maybe taken prior to starting the GIS Certificate.

1 This course maybe taken during Summer Quarter.

2 One technical elective required for certificate (any quarter).

Health Information Management Technology

Health Information Management Technology

Associate Degree

Medical Coding Certificate

*Please note: The Medical Transcription Certificate program has been phased out and is no longer offered. No new students will be accepted into the Medical Transcription Certificate program. Current Medical Transcription students must complete all coursework for the Medical Transcription Certificate program by the end of Autumn Quarter 2008.

The Health Information Management Technology program prepares the student to become a professional responsible for maintaining components of health information systems consistent with the medical, administrative, ethical, legal, accreditation, and regulatory requirements of the health care delivery system. In all types of health care facilities, the health information management technician possesses the technical knowledge and skills necessary to process, maintain, compile, and report health information data for reimbursement, facility planning, marketing, risk management, utilization management, quality assessment and research; abstract and code clinical data using appropriate classification systems; and analyze health records according to standards. The health information management technician may also be responsible for functional supervision of the various components of the health information system.

The Medical Coding Certificate program prepares students with entry-level skills needed to code, classify, and index diagnoses and procedures for the purpose of reimbursement, standardization, retrieval and statistical analysis. Principles in ICD-9-CM coding, CPT coding, and third-party reimbursement will be emphasized.

The Health Information Management Technology degree program and the Medical Coding Certificate program are Web-based programs. All technical coursework is offered online except for HIMT 276, HIMT 292, HIMT 294, and HIMT 296.

Proctored testing is required for most HIMT courses.

Health Information Management Technology

Upon completion of the associate degree in the Health Information Management Technology, the graduate will be able to:

- Demonstrate knowledge of human pathophysiology, medical terminology, pharmacology, and clinical data as it relates to the collection and use of health information.
- Review health records for completeness and accuracy.
- Verify components necessary to ensure appropriateness and adequacy of health care documentation.
- Maintain and compile health information using electronic applications and work processes.
- Apply legal principles, policies, regulations, and standards for the control, use, and dissemination of health information.
- Collect, compute, analyze, interpret, and present statistical

data related to health care services.

- Code, classify, and index diagnoses and procedures for the purpose of reimbursement, standardization, retrieval and statistical analysis.
- Review, abstract, retrieve, and compile health data for reimbursement, quality assessment, patient care research, clinical registries, and other informational needs.
- Apply principles of supervision and leadership and the tools used to effectively manage human resources.
- Demonstrate ethical practices as outlined in the American Health Information Management Association (AHIMA) Code of Ethics.

The HIMT program at Columbus State is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

Completion of the associate degree in Health Information Management Technology will permit graduates to sit for the Registered Health Information Technician (RHIT) certification examination and the Certified Coding Associate (CCA) examination. Graduates of the HIMT degree program may transfer to The Ohio State University, the University of Cincinnati, or the University of Toledo for a bachelor of science degree majoring in Health Information Management and Systems.

Medical Coding Certificate

Upon completion of the Medical Coding Certificate, the student will be able to:

- Demonstrate knowledge of human pathophysiology, medical terminology, pharmacology, and clinical data as it relates to the collection and use of health information.
- Review health records for completeness and accuracy.
- Identify components of appropriate and adequate documentation of health care.
- Code, classify, and index diagnoses and procedures for the purpose of reimbursement, standardization, retrieval, and statistical analysis.
- Abstract data from patient records for reimbursement, quality assessment, patient care research, clinical registries, and other identified informational needs.
- Demonstrate ethical practices as outlined in the American Health Information Management Association (AHIMA) Code of Ethics.

Specific Program Admissions Information

Students wishing to complete the HIMT degree or the Medical Coding Certificate must apply online as soon as possible at the following link: <http://www.csc.edu/DOCS/HIMT/index.htm>.

Students are accepted into the HIMT degree program and the Medical Coding Certificate program off the wait list each Spring Quarter in the order in which the applications were received. Applications are reviewed and accepted each spring. Students accepted in the spring start in the Autumn Quarter of the same year. All program admission requirements (except HIMT 111) must be met in order for a student to be accepted into the program. HIMT 111 is completed by the student the Summer Quarter of the year in which they are accepted. Only students accepted into the HIMT degree

program or the Medical Coding Certificate will be registered for HIMT 111.

Go to <http://csc.edu/DOCS/HIMT/forms.asp> to be added to the wait list for either the HIMT degree program or the Medical Coding Certificate program.

Listed below are requirements for admission to the Health Information Management Technology and the Medical Coding Certificate program. These requirements must be completed prior to acceptance into the HIMT degree program or the Medical Coding Certificate program.

- High school graduate or GED equivalency
- High School (or equivalent) Biology, with a grade of "C" or higher (must have been completed within the past 5 years) OR equivalent college credit for BIO 100 (completed within the past 5 years)
- High School Chemistry, with a grade of "C" or higher (must have been completed within the past 3 years) OR equivalent college credit for CHEM 100 (completed within the past 3 years)
- Placement into ENGL 101 – Beginning Composition
- Placement into No Reading Required
- Placement into MATH 102 – Beginning Algebra I
- Completion of CIT 095 – Computer File Management with a grade of "C" or higher.
- Completion of CIT 101 PC Applications I with a grade of "C" or higher.
- Completion of HIMT 111 – Introduction to HIMT with a grade of "C" or higher. To enroll in this course, you must be accepted into either the HIMT degree program or the Medical Coding Certificate program.
- Students must pass a drug screen and background check before they can be accepted into either the HIMT degree program or the Medical Coding Certificate program.

Students must earn a "C" or higher in all HIMT, basic related, and general education courses to earn an Associate of Applied Science degree in HIMT or to complete the Medical Coding Certificate program.

Students are expected to follow the established plans of study. If a student deviates from the established plan of study, it may take longer to complete a certificate and/or two-year degree.

Both the HIMT degree program and the Medical Coding Certificate program plans of study begin with Autumn Quarter.

Health Information Management Technology Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
BIO 121 Anatomy, Physiology & Pathology I	5
CIT 102 PC Applications II.....	3

HIMT 121	Advanced Medical Terminology.....	3
HIMT 135	Health Data Management	5
TOTAL CREDIT HOURS		19

Quarter 2		
ENGL 102	Essay and Research.....	3
BIO 122	Anatomy, Physiology & Pathology II.....	5
HIMT 141	Pharmacology for HIMT.....	3
HIMT 256	Clinical Data Analysis.....	3
HIMT 267	Principles of Management	3
TOTAL CREDITS HOURS		17

Quarter 3		
MATH 102	Beginning Algebra I.....	4
HIMT 133	Legal Aspects of Health Information	3
HIMT 243	Comparative Health Settings in HIM	3
HIMT 245	ICD-9-CM Coding	5
HIMT 257	Intro. to Health Statistics.....	3
TOTAL CREDIT HOURS		18

Quarter 4		
COMM 105	Speech or	
COMM 110	Conference & Group Discussion	3
ENGL 200	Business Communications.....	3
CIT 102C	PC Apps 2, Module 3,Access.....	1
HIMT 255	CPT-4 Coding	5
HIMT 292	Clinical Practicum I	3
HIMT 112	Electronic Health Concepts.....	2
TOTAL CREDIT HOURS		17

Quarter 5		
CIT 233	Expert Access.....	3
HIMT 113	Managed Care Trends.....	2
HIMT 259	Quality and Resource Management.....	3
HIMT 265	Medical Reimbursement	3
HIMT 275	Intermediate Coding	4
HIMT 294	Clinical Practicum II	3
TOTAL CREDIT HOURS		18

Quarter 6		
SSCI XXX	Social Science 100, 101, 102, 104, or 105.....	5
HUM XXX	HUM 111, 112, 113, 151, 152 or 224	5
HIMT XXX	Technical Elective.....	2
HIMT 296	Clinical Practicum III.....	3
TOTAL CREDIT HOURS		15
TOTAL DEGREE CREDIT HOURS		104

Technical Electives must be selected from the following list of courses: (Note: You are required to complete 4 hours of HIMT technical electives.)

HIMT 112	Electronic Health Concepts.....	2
HIMT 270	Case Management in Health Care.....	2
HIMT 274	Issues in Health Information Management.....	2

Please Note: BIO 261 – Human Anatomy, BIO 262 – Human Physiology, and BIO 263 – Human Pathophysiology can be taken in place of BIO 121 and BIO 122.

Medical Coding Certificate

COURSE	CR	
Quarter 1		
BIO 121	Anatomy, Physiology, & Pathology I.....	5
HIMT 121	Advanced Medical Terminology.....	3
HIMT 135	Health Data Management	5
TOTAL CREDIT HOURS		13

Quarter 2		
BIO 122	Anatomy, Physiology, & Pathology II.....	5
HIMT 141	Pharmacology for HIMT.....	3
HIMT 256	Clinical Data Analysis.....	3
TOTAL CREDIT HOURS		11

Quarter 3	
HIMT 245	ICD-9-CM Coding .....5
TOTAL CREDIT HOURS .....5	
Quarter 4	
HIMT 255	CPT-4 Coding .....5
TOTAL CREDIT HOURS .....5	
Quarter 5	
HIMT 113	Managed Care Trends.....2
HIMT 265	Medical Reimbursement .....3
HIMT 275	Intermediate Coding.....4
ENGL 101	Beginning Composition .....3
TOTAL CREDIT HOURS .....12	
Quarter 6	
HIMT 276	Medical Coding Practicum .....3
TOTAL CREDIT HOURS .....3	
TOTAL CERTIFICATE CREDIT HOURS .....49	

Heating, Ventilating and Air Conditioning Technology

Heating, Ventilating and Air Conditioning Technology Associate Degree High Pressure Boiler License Training Program Large Commercial Certificate Residential/Light Commercial Certificate

The Heating, Ventilating and Air Conditioning Technology prepares graduates for a wide variety of occupations in the \$150 billion mechanical environment science field. Graduates find employment with large commercial heating and air conditioning contractors, residential mechanical contractors, parts and equipment distributors, large commercial and industrial facility maintenance departments, hospital facilities maintenance departments, custom design or new construction markets.

The large increase in new high-rise buildings and real estate development within all major cities is a clear indication of the rapid increase in job market opportunities available. Also many graduates find employment with equipment manufacturers in research and development. Today’s society is demanding more emphasis on the ethical, legal, and regulatory requirements relating to environmental concerns facing the HVAC industry today and in the future.

The degree program offers the training needed to develop a high degree of technical skill, as well as the ability to work with minimal supervision and a strong sense of personal responsibility. Graduates with field experience and further experience in business management can look to ownership of their own HVAC companies.

The four-course High Pressure Boiler License Training program prepares students to take the State of Ohio High Pressure Boiler Operators License examination. Students will still be required to establish actual work experience around high pressure boilers in accordance with State of Ohio requirements. This boiler license

program gives technicians the opportunity to progress from licensed boiler operator through many more responsible jobs in industry and commercial applications.

Upon completion of the associate degree in Heating, Ventilating and Air Conditioning Technology, the graduate will be able to:

- Create manual and computer graphic representations of HVAC projects.
- Select piping materials and design piping systems.
- Be able to perform designs for commercial and industrial piping systems, including water, steam and refrigeration piping.
- Calculate heat loss and heat gain loads for residential and commercial structures, using National ACCA manuals and computer software.
- Use testing and analyzing instruments and calculate combustion process for various fuels (e.g., natural gas, coal, and fuel oil) to ensure proper operation for the most efficient operation of boilers and furnaces.
- Assist in the selection and application of various residential and commercial HVAC equipment to solve environmental problems.
- Assist in the design of automatic control circuits using electro-mechanical and electronic control devices.
- Assist in designing preventative maintenance programs for various HVAC systems.
- Research and apply local, state, and national codes to various environmental systems.
- Assist in conducting energy audits of residential and commercial structures.
- Test and calculate airflow through system equipment.
- Read control schematics and test control circuits for malfunctions.
- Troubleshoot and repair gas/electric furnaces, fuel oil furnaces, split system air conditioners and heat pumps, humidifiers, and electronic air cleaners.

Heating, Ventilating and Air Conditioning Technology Associate Degree

COURSE	CR
Quarter 1	
ARCH 110	Construction Drafting – Manual I (First Term) .....2
ARCH 112	Construction Drafting – CAD I (Second Term).....2
CIT 101	PC Applications 1 .....3
ENGL 101	Beginning Composition .....3
HAC 152	Instrumentation/Combustion Process .....4
HAC 161	Hand Tools Laboratory .....4
TOTAL CREDIT HOURS .....18	
Quarter 2	
HAC 116	Piping Systems .....3
HAC 141	Principles of Refrigeration .....4
HAC 183	HAC Wiring Circuits I .....4
HAC 222	Load Calculations I .....4
MATH 104	Intermediate Algebra .....5
TOTAL CREDIT HOURS .....20	

Quarter 3

ENGL 102	Essay & Research	3
HAC 231	Load Calculations II	4
HAC 243	Air Conditioning Systems	4
HAC 284	HAC Wiring Circuits II	4
MATH 148	College Algebra	5
TOTAL CREDIT HOURS	.....	20

Quarter 4

BMGT 231	Small Business Development	4
ENGL 200	Business Communications	3
HAC 242	HAC Mechanical Standards/Safety	3
HAC 253	Automatic Controls I	3
HAC 254	Heating Systems	4
TOTAL CREDIT HOURS	.....	17

Quarter 5

BMGT 232	Small Business Operations	4
COMM 105	Speech	3
HAC 256	Automatic Controls II	3
HAC XXX	Technical Elective	4
TOTAL CREDIT HOURS	.....	14

Quarter 6

HAC 244	Heat Pump Systems	4
HAC 266	Advanced Problems	4
HUM XXX	Humanities 111,112,113,151,152 or 224	5
SSCI 10x	Social Science 100,101, 102, 104, or 105	5
TOTAL CREDIT HOURS	.....	18
TOTAL DEGREE CREDIT HOURS	.....	107

Technical Elective must be selected from the following list of courses:

HAC 291	Field Experience	4
HAC 258	Pneumatic Controls I	4
HAC 285	HAC Electronic Controls I	4
HAC 287	Boiler Systems	4
HAC 288	Commercial A/C Systems	4
HAC 299*	Special Topics in HAC	1-5

* Please see advisor before scheduling this class.

High Pressure Boiler License Training Program

COURSE		CR
Quarter 1		
HAC 116	Piping Systems	3
HAC 152	Instrumentation/Combustion	4
HAC 242	HAC Mechanical Standards/Safety	3
HAC 287	Boiler Systems	4
TOTAL CERTIFICATE CREDIT HOURS	.....	14

Large Commercial Certificate

COURSE		CR
Quarter 1		
HAC 141	Principles of Refrigeration	4
HAC 183	HAC Wiring Circuits I	4
TOTAL CREDIT HOURS	.....	8

Quarter 2

HAC 152	Instrumentation/Combustion	4
HAC 287	Boiler Systems	4
TOTAL CREDIT HOURS	.....	8

Quarter 3

HAC 288	Commercial A/C Systems	4
HAC 256	Automatic Controls II	3
TOTAL CREDIT HOURS	.....	7

Quarter 4

HAC 285	HAC Electronic Controls I	4
HAC 258	Pneumatic Controls	4
TOTAL CREDIT HOURS	.....	8
TOTAL CERTIFICATE CREDIT HOURS	.....	31

Residential/Light Commercial Certificate

COURSE		CR
Quarter 1		
HAC 141	Principles of Refrigeration	4
HAC 183	HAC Wiring Circuits I	4
TOTAL CREDIT HOURS	.....	8

Quarter 2

HAC 152	Instrumentation/Combustion	4
HAC 284	HAC Wiring Circuits II	4
TOTAL CREDIT HOURS	.....	8

Quarter 3

HAC 243	Air Conditioning Systems	4
HAC 161	Hand Tools Laboratory	4
TOTAL CREDIT HOURS	.....	8

Quarter 4

HAC 244	Heat Pump Systems	4
HAC 254	Heating Systems	4
TOTAL CREDIT HOURS	.....	8
TOTAL CERTIFICATE CREDIT HOURS	.....	32

Hospitality Management**Chef Apprenticeship Major****Dietetic Technician Major****Foodservice/Restaurant Management Major****Travel/Tourism/Hotel Management Major****Dietary Manager Certificate****Travel Industry Certificate****Baking Certificate****School Foodservice Manager Certificate**

The Hospitality Management programs provide quality learning experiences to enhance initial employment opportunities and to improve technical and supervisory skills for career advancement in foodservice, lodging, and tourism. Several majors leading to associate degrees are available for Chef Apprenticeship, Dietetic Technician, Foodservice/Restaurant Management, and Travel/Tourism/Hotel Management. The programs are accredited by the Commission on Accreditation for Hospitality Management Programs (CAHM). In addition, Dietary Manager, Travel Industry, Baking, and School Foodservice Manager Certificate programs are available.

The Chef Apprenticeship major is offered in cooperation with the American Culinary Federation Columbus Chapter. It includes

the theory-related classroom instruction and on-the-job training required for the National Apprenticeship Training Program of the American Culinary Federation (ACF). A Supplementary Application is required. (See Specific Program Admissions Information) Chef apprentices are placed for employment for three years of on-the-job training under a professional chef in restaurants, clubs, hotels, or catering businesses. At the same time, the apprentices attend classes at Columbus State one full day each week to work toward the Associate in Applied Science Degree. The Columbus State program is accredited by the American Culinary Federation Foundation Accrediting Commission. Program graduates qualify as Certified Culinarians through the ACF and as Journeyman Chefs through the U.S. Department of Labor, Bureau of Apprenticeship and Training.

The Dietetic Technician major is accredited by the Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association. The seven-quarter program provides practicums coordinated with classroom instruction. Graduates are eligible for membership in the American Dietetic Association and qualify to take the national examination given by the Commission for Dietetic Registration to be credentialed as a Dietetic Technician Registered (DTR).

The Foodservice/Restaurant Management major combines classroom instruction, laboratory experience, and hospitality industry work experiences. The associate degree program prepares graduates for supervisory positions in a variety of foodservice operations. Certificate-bearing courses leading to the completion of the National Restaurant Association Professional Management Development Program are included. This major is accredited by the American Culinary Federation Foundation Accrediting Commission, and graduates can qualify as Certified Culinarians by the American Culinary Federation upon successful completion of national written and practical examinations.

The Travel/Tourism/Hotel Management major prepares students for a wide variety of positions in travel agencies, hotels, attractions, and related tourism organizations. Required cooperative work experiences and hands-on instruction in computer reservations systems are included in a course of study appropriate for individual growth and advancement in hospitality and tourism.

The 18-credit Dietary Manager Certificate is approved by the Dietary Managers Association. It is open to persons working in the foodservice operation of a healthcare facility that employs a Registered Dietitian, who serves as the preceptor to the student. Persons completing the program are eligible to take the national certification exam to become a Certified Dietary Manager (CDM). Credit hours earned may be applied to an Associate in Applied Science Degree in the Dietetic Technician major.

The Travel Industry Certificate program consists of four courses that give students a fundamental core knowledge of the travel industry. It prepares students for entry positions with travel agencies, tour companies, airlines, car rental or other travel organizations. Courses satisfactorily completed can be applied to the Associate in Applied Science Degree in the Travel/Tourism/Hotel Management major at Columbus State.

The Baking Certificate program will prepare students to assist in the preparation and production of pies, cookies, cakes, breads, rolls, desserts, and other baked goods in a variety of baking environments including independent and in-store bakeries as well as large commercial bakeries, restaurants, and hotels. Duties may include stocking ingredients, preparing and cleaning equipment, measuring ingredients, mixing, scaling, forming, proofing, oven tending, product finishing, and presentation.

The School Foodservice Manager Certificate program includes four courses. The completion of these four courses will prepare the student to meet the education requirements for the third level of certification established by the School Nutrition Association.

In addition to CSCC general education outcomes, upon completion of the associate degree in Hospitality Management, the graduate will be able to:

- Maintain appropriate standards of professionalism, including ethical behavior and adherence to dress and grooming codes required for the industry.
- Set and maintain high quality service standards for satisfying diverse customers.
- Demonstrate effective written and oral communication with management, employees and customers.
- Demonstrate skills in team-building, coaching, motivating, and supervising employees.
- Demonstrate a knowledge of hiring and training processes.
- Utilize computer software and on-line resources applicable to the industry.
- Perform mathematical calculations necessary for the industry.
- Demonstrate problem solving and critical thinking skills.
- Analyze financial reports and determine appropriate operational procedures.
- Establish and maintain safety, sanitation, and security standards.
- Demonstrate the ability to market and sell products and services.
- Demonstrate a basic knowledge of, and an ability to comply with, current laws, rules, and regulations governing food service, lodging, and tourism.

Chef Apprenticeship Major

In addition to the general Hospitality Management competencies, a graduate majoring in the Chef Apprenticeship program will be able to:

- Produce high quality food products using appropriate ingredients and equipment.
- Apply nutrition principles to menu planning and food production for a variety of customers.
- Define concepts and procedures for purchasing, receiving, storage, and inventory and develop specifications for purchase of food and nonfood items.
- Identify methods for controlling bar/lounge operations including beverage identification and responsible legal beverage service.
- Demonstrate a basic knowledge of meeting planning and catering services.
- Plan, organize, and supervise the production and service of food and beverage to customers.

- Work effectively as a first-line supervisor and trainer in food production.

Dietetic Technician Major

In addition to the general Hospitality Management competencies, a graduate majoring in the Dietetic Technician program will be able to:

- Apply nutrition principles to menu planning and food production for a variety of customers.
- Modify diets and menus to meet the needs of persons requiring texture, energy, and nutrient modifications.
- Gather and analyze diet history data and apply this information to nutrition care planning for persons on normal and modified diets.
- Provide basic nutrition education for individuals and groups.
- Plan, organize, and supervise the production and service of food and beverage to customers.
- Define concepts and procedures for purchasing, receiving, storage and inventory and develop specifications for purchase of food and nonfood items.
- Produce high quality food products using appropriate ingredients and equipment.
- Monitor and analyze quality of patient care and foodservice operations.

Foodservice/Restaurant Management Major

In addition to the general Hospitality Management competencies, a graduate majoring in Foodservice/Restaurant Management will be able to:

- Produce high quality food products using appropriate ingredients and equipment.
- Apply nutrition principles to menu planning and food production for a variety of customers.
- Define concepts and procedures for purchasing, receiving, storage and inventory and develop specifications for purchase of food and nonfood items.
- Identify methods for controlling bar/lounge operations including beverage identification and responsible legal beverage service.
- Plan, organize, and supervise the production and service of food and beverage to customers.
- Demonstrate a basic knowledge of meeting planning and catering services.

Travel/Tourism/Hotel Management Major

In addition to the general Hospitality Management competencies, a graduate majoring in Travel/Tourism/Hotel Management will be able to:

- Apply destination geography knowledge as required in hotels and tourism.
- Utilize travel industry reference materials and the internet.
- Complete detailed customer travel itineraries for individuals and group tours.
- Demonstrate a working knowledge of lodging operations.
- Demonstrate a basic knowledge of meeting planning and catering services.
- Create a plan for promoting a tourist event or site in the community or region.

Specific Program Admissions Information

Listed are additional requirements for admission to the Chef Apprenticeship Major and the Dietetic Technician Major.

Chef Apprenticeship Major

- High school graduate or GED equivalency
- Placement into ENGL 101 – Beginning Composition
- Placement into MATH 101 – Business Mathematics
- Supplemental application required by the department (May 15 and November 15 deadlines)

Dietetic Technician Major

- High school graduate or GED equivalency
- Recommended high school or equivalent courses in Algebra, Chemistry and Biology
- Completed health statement (see Program Coordinator)
- Placement into DEV 031 or higher
- Placement into ENGL 100 or higher

Chef Apprenticeship Major

COURSE	CR
Quarter 1	
HOSP 101 Survey of Hospitality/Tourism Industry	3
HOSP 102 Foodservice Equipment	2
HOSP 122 Hospitality Sanitation and Safety.....	3
HOSP 293 Hospitality Co-Op Work Experience I	3
TOTAL CREDIT HOURS	11
Quarter 2	
HOSP 153 Nutrition for a Healthy Lifestyle.....	5
ENGL 101 Beginning Composition	3
TOTAL CREDIT HOURS	8
Quarter 3	
MATH 101 Business Math	5
HOSP 107 Food Principles	5
TOTAL CREDIT HOURS	10
Quarter 4	
HOSP 106 Food Laboratory I	3
CIT 101 PC Applications I	3
COMM 110 Conference & Group Discussion	3
TOTAL CREDIT HOURS	9
Quarter 5	
HOSP 123 Food Purchasing	3
HOSP 216 Food Laboratory II	3
HOSP 294 Hospitality Co-Op Work Experience II	3
TOTAL CREDIT HOURS	9
Quarter 6	
HOSP 203 Beverage Management	3
ENGL 102 Essay & Research	3
HOSP 225 Menu Development.....	3
TOTAL CREDIT HOURS	9
Quarter 7	
HOSP 270 Catering Services	2
SSCI 101 Cultural Diversity	5
ENGL 200 Business Communication.....	3
TOTAL CREDIT HOURS	10
Quarter 8	
HOSP 214 International Cuisine	3
NSCI 101 Natural Science I	5
TOTAL CREDIT HOURS	8

Quarter 9		
HOSP 295	Hospitality Co-Op Work Experience III	3
HOSP 217	Garde Manger	3
HUM XXX	Humanities 111,112,113,151,152 or 224	5
TOTAL CREDIT HOURS		11

Quarter 10		
ACCT 106	Introduction to Accounting	5
HOSP 218	Fundamentals of Baking	3
TOTAL CREDIT HOURS		8

Quarter 11		
HOSP 205	Records and Cost Control	4
BMGT 102	Managing Interpersonal Skills I	3
TOTAL CREDIT HOURS		7

Quarter 12		
HOSP 224	Hospitality Supervision & Quality Management	5
HOSP 286	Apprenticeship Final Project	2
TOTAL CREDIT HOURS		7
TOTAL DEGREE CREDIT HOURS		107

Dietetic Technician Major

COURSE		CR
Quarter 1		
HOSP 102	Foodservice Equipment	2
HOSP 122	Hospitality Sanitation and Safety	3
DIET 191	Dietetic Technician Practicum I	1.4
ENGL 101	Beginning Composition	3
MLT 100	Introduction to Healthcare	3
CIT 101	PC Applications I	3
TOTAL CREDIT HOURS		15.4

Quarter 2		
HOSP 107	Food Principles	5
HOSP 109	Food Production	3
DIET 192	Dietetic Technician Practicum II	2
MULT 101	Medical Terminology	2
MATH 102	Beginning Algebra I	4
TOTAL CREDIT HOURS		16

Quarter 3		
HOSP 123	Food Purchasing	3
BIO 261	Human Anatomy	5
DIET 193	Dietetic Technician Practicum III	2
HOSP 153	Nutrition for a Healthy Lifestyle	5
TOTAL CREDIT HOURS		15

Quarter 4		
BMGT 102	Managing Interpersonal Skills I	3
ENGL 102	Essay & Research	3
BIO 262	Human Physiology	5
COMM 105	Speech	3
TOTAL CREDIT HOURS		14

Quarter 5		
DIET 261	Community Nutrition: A Life Cycle Approach	2
DIET 297	Dietetic Technician Practicum IV	3
DIET 275	Medical Nutrition Therapy I	5
HOSP 225	Menu Development	3
DIET 263	Nutrition Care Process	2
TOTAL CREDIT HOURS		15

Quarter 6		
SSCI 101	Cultural Diversity	5
DIET 298	Dietetic Technician Practicum V	2
DIET 276	Medical Nutrition Therapy II	5
HOSP 224	Hospitality Supervision & Quality Management	5
TOTAL CREDIT HOURS		17

Quarter 7		
ENGL 202	Writing for Health and Human Services	3
DIET 265	Dietetic Technician Seminar	1
DIET 299	Dietetic Technician Practicum VI	2.5
HOSP 219	Food Production Management	4
HUM XXX	Humanities 111,112,113,151, 152 or 224	5
TOTAL CREDIT HOURS		15.5
TOTAL DEGREE CREDIT HOURS		108.9

Foodservice/Restaurant Management Major

COURSE		CR
Quarter 1		
HOSP 101	Survey of Hospitality/Tourism Industry	3
HOSP 102	Foodservice Equipment	2
HOSP 122	Hospitality Sanitation and Safety	3
HOSP 153	Nutrition for a Healthy Lifestyle	5
CIT 101	PC Applications I	3
TOTAL CREDIT HOURS		16

Quarter 2		
HOSP 107	Food Principles	5
HOSP 109	Food Production	3
ENGL 101	Beginning Composition	3
MATH 101	Business Math	5
TOTAL CREDIT HOURS		16

Quarter 3		
HOSP 123	Food Purchasing	3
BMGT 102	Managing Interpersonal Skills	3
NSCI 101	Natural Science I	5
ENGL 102	Essay & Research	3
ACCT 106	Introduction to Accounting I	5
TOTAL CREDIT HOURS		19

Quarter 4		
HOSP 225	Menu Development	3
HOSP 205	Records & Cost Controls	4
HOSP 143	Hospitality and Travel Law	3
HOSP 272	Catering Services	2
SSCI 101	Cultural Diversity	5
TOTAL CREDIT HOURS		17

Quarter 5		
HOSP 203	Beverage Management	3
XXX XXX	Technical Elective	3
HOSP 291	Hospitality Co-Op Work Experience I	3
HOSP 224	Hospitality Supervision & Quality Management	5
COMM 105	Speech	3
TOTAL CREDIT HOURS		17

Quarter 6		
HOSP 246	Hospitality Sales and Marketing	3
HOSP 219	Food Production Management	4
HOSP 292	Hospitality Co-Op Work Experience II	3
HUM XXX	Humanities 111,112,113,151, 152 or 224	5
ENGL 200	Business Communications	3
TOTAL CREDIT HOURS		18
TOTAL DEGREE CREDIT HOURS		103

Technical Electives

The following courses are approved for technical elective requirements:

HOSP 217	Garde Manger	3
HOSP 218	Fundamentals of Baking	3
BMGT 216	Business Ethics	3
HOSP 214	International Cuisine	3
BMGT 231	Small Business Development	4
HOSP 273	Casino Management	3

Travel/Tourism/Hotel Management Major

COURSE		CR
Quarter 1		
CIT 101	PC Applications	3
ENGL 101	Beginning Composition	3
MATH 101	Business Math	5
HOSP 101	Survey of Hospitality/Tourism Industry	3
HOSP 154	Destination Geography	5
TOTAL CREDIT HOURS		19

Quarter 2		
HOSP 145	Lodging Operations	5
MKTG 111	Marketing Principles	5
HOSP 157	Travel and Tourism Operations	5
ENGL 102	Essay & Research	3
TOTAL CREDIT HOURS		18

Quarter 3		
PSY 100	Introduction to Psychology	5
MKTG 226	Customer Service Principles and Practices	4
HOSP 122	Hospitality Sanitation and Safety.....	3
HOSP 143	Hospitality and Travel Law.....	3
COMM 110	Conference & Group Discussion	3
TOTAL CREDIT HOURS		18

Quarter 4		
XXX XXX	Technical Elective	3
BMGT 102	Managing Interpersonal Skills I	3
ACCT 106	Introduction to Accounting	5
HOSP 270	Event Management	3
HOSP 291	Hospitality Co-Op Work Experience I	3
TOTAL CREDIT HOURS		17

Quarter 5		
ENGL 200	Business Communications	3
HOSP 206	Management Accounting for Hospitality.....	4
HOSP 257	Global Distribution Systems	3
HOSP 224	Hospitality Supervision & Quality Management	5
HOSP 246	Hospitality Sales & Marketing	3
TOTAL CREDIT HOURS		18

Quarter 6		
NSCI 101	Natural Science I	5
SSCI 101	Cultural Diversity.....	5
HUM XXX	Humanities 111,112,113,151, 152 or 224	5
HOSP 292	Hospitality Co-Op Work Experience II	3
TOTAL CREDIT HOURS		18
TOTAL DEGREE CREDIT HOURS		108

Technical Elective:

The following courses are approved for technical elective requirements:

HOSP 203	Beverage Management.....	3
BMGT 216	Business Ethics	3
BMGT 281	Business Etiquette.....	3
BMGT 231	Small Business Development	3
HOSP 273	Casino Management	3

Baking Certificate

COURSE		
Quarter 1		
HOSP 122	Hospitality Sanitation and Safety.....	3
HOSP 110	Baking Principles.....	3
TOTAL CREDIT HOURS		6

Quarter 2		
HOSP 112	Basic Yeast and Quick Breads	4
HOSP 113	Pies and Pastries.....	3
TOTAL CREDIT HOURS		7

Quarter 3		
HOSP 111	Principles of Baking Operations	3
HOSP 114	Advanced Breads	4
TOTAL CREDIT HOURS		7

Quarter 4		
HOSP 115	Cakes, Cookies and other Desserts	3
HOSP 116	Bakery Presentation and Decoration.....	3
TOTAL CREDIT HOURS		6
TOTAL CERTIFICATE CREDIT HOURS		26

Dietary Manager Certificate

COURSE		CR
Quarter 1		
DMGR 101	Dietary Manager Seminar I	4
DMGR 194	Dietary Manager Co-Op/Work Exp. I	2
TOTAL CREDIT HOURS		6

Quarter 2		
DMGR 102	Dietary Manager Seminar II	4
DMGR 195	Dietary Manager Co-Op/Work Exp. II	2
TOTAL CREDIT HOURS		6

Quarter 3		
DMGR 103	Dietary Manager Seminar III	4
DMGR 196	Dietary Manager Co-Op/Work Exp. III	2
TOTAL CREDIT HOURS		6
TOTAL CERTIFICATE CREDIT HOURS		18

School Foodservice Manager Certificate

COURSE		CR
Quarter 1		
HOSP 122	Hospitality Sanitation	3
TOTAL CREDIT HOURS		3

Quarter 2		
SMGR 101	Introduction to School Foodservice	4
TOTAL CREDIT HOURS		4

Quarter 3		
SMGR 102	School Nutrition and Menu Planning	4
TOTAL CREDIT HOURS		4

Quarter 4		
SMGR 103	School Foodservice Management/Human Resources	4
TOTAL CREDIT HOURS		4
TOTAL CERTIFICATE CREDIT HOURS		15

Travel Industry Certificate*

COURSE		CR
HOSP 154	Destination Geography	5
HOSP 157	Travel and Tourism Operations	5
HOSP 257	Computer Reservations Systems	3
HOSP 246	Hospitality Sales and Marketing	3
TOTAL CERTIFICATE CREDIT HOURS		16

*See course descriptions for prerequisites and recommended sequence

Human Resources Management Technology

Human Resources Management Associate Degree

Over the last several decades the human resource (personnel) function has evolved from a “hiring/firing paper processing” job to an extremely complex profession. Human resources management requires the ability to understand how all the facets of human resources management impact one another and the organization as a whole. The myriad federal and state laws regulating virtually all aspects of the employee/employer relationship, compounded by conflicting judicial interpretations, require professionals skilled in understanding and applying these laws to day-to-day management decisions. Wrong decisions, by any representative of the organization, in hiring, discipline, termination, or the way employees are treated may result in a multimillion dollar lawsuit, costing thousands of dollars in legal fees, even if the company should win.

In the last few decades, senior management has begun to recognize that human resource management professionals, skilled in human resource and labor law, labor relations, policy development and administration, compensation and benefits, and employee relations, make a positive impact on a firm's bottom line. Management has also come to realize that the human resource management “professional” is everyone in the human resources department, whether that staff consists of 2 or 25 people.

The purpose of Human Resources Management Technology program is to teach human resources management skills and provide hands-on application in a learning environment that bridges the necessity of academic theory with human resources management in “the real world.” Throughout, the program provides for a strong legal foundation in each area of human resources management; then it provides for application of that foundation to the human resources management functions.

Upon completion of the associate degree in Human Resources Management Technology, the graduate will be able to:

- Research human resources laws, cases, and issues using the Internet and other resources.
- Apply human resources laws impacting private sector employers to day-to-day business operations.
- Write legal human resources policies, procedures, programs and employee handbook summaries for an organization.
- Administer manual and automated records and information management systems to support the key tasks of the human resources department and meet the legislative requirements with which the organization must comply.
- Develop protocol for and conduct the various types of interviews used in business.
- Discuss the effects of chemical dependency on the work environment and identify the community resources available to the organization, employee, and family.
- Develop a job analysis questionnaire and write job descriptions and job specifications
- Develop/administer a monetary compensation system.
- Develop/administer employee benefit programs.
- Develop/administer a performance appraisal system.

- Provide assistance in the union organizing, negotiating, grieving, and arbitrating processes.

Traditional Classes and Distance Learning Choices at Columbus State

The Human Resources Management Technology program is proud to offer traditional and distance learning options for our students. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at our main campus and off-campus locations. Human Resources Management Technology also offers distance learning courses that provide the same high quality learning as traditional instruction, yet with the flexibility of being able to complete your course work online or through video based instruction.

Human Resources Management Technology Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
MATH 103 Beginning Algebra II.....	4
CIT 102 PC Applications 2	3
BMGT 111 Management	5
OADM 101 Business Grammar.....	3
TOTAL CREDIT HOURS	18

Quarter 2	
ENGL 102 Essay and Research	3
MATH 135 Elementary Statistics	5
HRM 121 Human Resources Management	4
CIT 137 Advanced Information Presentation	3
LEGL 261 Business Law I.....	3
TOTAL CREDIT HOURS	18

Quarter 3	
COMM 105 Speech.....	3
PSY 100 Psychology.....	5
ECON 200 Microeconomics.....	5
HRM 122 Human Resources Policy and Procedure Writing.....	4
HRM 124 Personnel Interviewing	4
TOTAL CREDIT HOURS	21

Quarter 4	
ENGL 200 Business Communications.....	3
HRM 220 Labor Relations.....	5
HRM 221 Staffing Under the Law.....	4
HRM 224 Human Resources Records Management	3
HRM 225 Workplace Safety.....	3
TOTAL CREDIT HOURS	18

Quarter 5	
BMGT 211 Organizational Behavior	4
HRM 222 Monetary Compensation.....	4
HRM 226 Mandatory Benefits.....	4
HRM 227 Voluntary Benefits.....	4
TOTAL CREDIT HOURS	16

Quarter 6	
NSCI 101 Natural Science I.....	5
HUM XXX Humanities 111,112,113,151,152, or 224	5
HRM 240 Administration of HRM.....	5
HRM 242 HRM Practicum	2
HRM 243 HRM Practicum Seminar.....	2
TOTAL CREDIT HOURS	19
TOTAL DEGREE CREDIT HOURS	110

Interactive Media

Interactive Media Associate Degree Digital Audio/Video Production Major Webtech: Web Design Certificate

The Interactive Media program provides the community with skilled professionals who can create and assemble multimedia products for corporate interactive training, advertising, and marketing purposes. Graduates are able to develop and produce scripts and computer animation, and apply multimedia technology to assemble graphics, text, sound, and video into meaningful productions.

The program supports an industry need to provide multimedia professionals to work in the ever-expanding market of integrated and interactive media communications, with a growing emphasis in Web site development.

The Interactive Media Associate Degree program is designed to impart four critical skills to its graduates:

- Design
- Scripting (source code and application), including HTML, CSS, Javascript, and Actionscript
- Familiarity with various design-oriented application programs including: Adobe Photoshop, ImageReady, Flash, Dreamweaver, Illustrator, and Maya
- Experience in both the Macintosh and Windows platforms

By mastering these four areas, program graduates will be able to go beyond basic design and layout to complete the “big picture” regarding media structure and flowcharting. As a result, program graduates can cross cultural, aesthetic and technical boundaries.

The Digital Audio/Video Production major is designed to address the need for professionally trained graphic design and interactive media professionals who have the skill set to utilize audio and video assets (typically called “rich media”) in the production of new media whether it be in a CD-ROM, DVD, interactive Web sites or other delivery systems.

The Webtech: Web Design Certificate is designed specifically for the needs of the working multimedia professional. It covers the skills required to design effective and attractive Web pages including use of color, typography, buttons, and animation, and on the skills required for structuring and implementing the use of multimedia features such as sound, animation, and interactivity. Because of the scope of content covered and the accelerated pace of delivery, certificate courses are recommended for those individuals with significant multimedia experience.

The jobs available in interactive multimedia are varied. Typical job possibilities for program graduates include: multimedia technician, multimedia specialist, multimedia developer, media specialist, instructional design technician, computer graphic artist, 3D computer animator, multimedia illustrator, desktop media publisher, interface designer, animator, script integrator, digital journalist, and presentation artist.

Upon completion of the Associate Degree program in Interactive Multimedia, the graduate will be able to:

- Possess a working-level knowledge of the interactive multimedia field and how it affects society and industry.
- Comprehend the relationship between design, marketing, and interactive multimedia projects.
- Understand the purpose and interrelationship between design, scripting, and software.
- Be able to evaluate the strengths and weaknesses of project design including storyboarding, diagramming, flowcharting, and brand relevance.
- Know the core concepts of scripting as they apply to multimedia and Web development
- Be familiar with many of the programming languages used by the multimedia professional (HTML, CSS, Javascript, MySQL and CGI Scripting) by creating sites using various scripting languages.
- Have gained exposure to industry standard digital imaging programs (Photoshop/ImageReady) by using the software to solve a variety of “real world” design problems.
- Know how to retrieve, enhance, create, optimize, store and otherwise modify images for digital use (Web or CD development).
- Be familiar with basic concepts of digital conversion, video coding and processing, and integrating digital audio with video.
- Learn the basic principles of digital video editing using various original or provided video clips.
- Understand the basic principles of 2D design, the elements of design, and concepts of forms and structures.
- Use digital design software (such as Illustrator) to acquire technical and aesthetic 2d design skills.
- Comprehend the basic concepts of 3D modeling: model construction, rendering, lighting, and animation.
- Create a functional interactive, animated Web presence from conceptual stages to finished product.
- Possess extensive knowledge of industry standard Web animation software (Flash with a 30-week course sequence).
- Gain important insights on the actual functioning of working multimedia groups and how those groups function as part of a large system.
- Understand the interrelationship between front-end design and back-end results.
- Gain working knowledge of Web design application software using Dreamweaver.
- Use storyboard, flowchart and drawing skills to represent finished versions of a Web site, an interactive CD or a video.
- Complete an interactive portfolio.
- Gain real-world experience working as an intern in a multimedia-related company.

In addition to the Interactive Multimedia competencies, graduates completing an Audio/Visual Production major will be able to:

- Understand the role of audio/visual production in an integrated marketing communications plan.
- Use software tools to capture audio and video from various sources.
- Use sound and sound editing channels to enhance video productions.

- Understand copyright and fair use laws as they relate to audio/video production.
- Stream and import video for web productions.
- Identify ways to incorporate text and character animation into video productions.
- Demonstrate an ability to record voice, music, and effect for multimedia products.
- Demonstrate an understanding of the processes involved in planning, scripting, recording, and editing a digital audio/video production.

NOTE: For many Interactive Multimedia courses, majors may wish to purchase the relevant software. Interactive Multimedia labs have limited availability outside of class time; access to software outside of the lab will enable students to work on class assignments outside of the lab setting.

Interactive Media Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
GRPH 112	Publishing with Quark Xpress & InDesign .....5
IMMT 101	Principles of Interactive Media .....3
MATH 103	Algebra II .....4
HUM XXX	Humanities 111, 112,113,151,152 or 154 .....5
TOTAL CREDIT HOURS	.....20
Quarter 2	
ENGL 102	Essay & Research .....3
GRPH 113	Fundamentals of Layout and Storyboarding .....4
MKTG 102	Branding .....3
IMMT 111	Foundations of Media .....4
TOTAL CREDIT HOURS	.....14
Quarter 3	
BMGT 257	Project Management .....3
COMM 105	Speech .....3
GRPH 251	Photoshop & Design I .....5
IMMT 150	Basic Cinematography & Editing .....4
GRPH243	Vector Illustration .....5
TOTAL CREDIT HOURS	.....20
Quarter 4	
ENGL 207	Writing for the Web .....3
IMMT 216	Media Graphics & Optimization (Photoshop/ImageReady) ...4
IMMT 217	Video Editing .....3
IMMT 236	3D Modeling .....4
IMMT 237	Beginning Flash [Design] .....4
TOTAL CREDIT HOURS	.....18
Quarter 5	
SSCI 100	Globalization and the Social Sciences .....5
IMMT 213	Designing an e-Commerce Website .....4
IMMT 238	Intermediate Flash [Development] .....4
IMMT 262	Web Publishing: Site Design .....4
IMMT XXX	Technical Elective .....4
TOTAL CREDIT HOURS	.....21
Quarter 6	
IMMT 214	Web Database Development .....4
IMMT 239	Advanced Flash [Advanced Scripting] .....4
IMMT 251	Interactive Media Practicum .....4
IMMT 252	Interactive Media Seminar .....2
IMMT 271	Interactive Portfolio Development .....4
TOTAL CREDIT HOURS	.....18
TOTAL DEGREE CREDIT HOURS	.....110

ELECTIVES

IMMT 250	Document Transfer Using Adobe Acrobat .....2
IMMT 297	Special Topics in Interactive Multimedia 1-6
GRPH 111	Black and White Photography .....4
GRPH 114	Digital Photography .....4
GRPH 252	Advanced Digital Imaging .....4
MKTG 150	Introduction to e-Commerce .....3
MKTG 237	Database Marketing .....3

Digital Audio/Video Production Major

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
MATH 103	Algebra II .....4
MKTG 102	Branding .....3
IMMT 101	Principles of Interactive Media .....3
HUM XXX	CIV I/II/III or Am. History I, II, II .....5
TOTAL CREDIT HOURS	.....18
Quarter 2	
ENGL 102	Essay & Research .....3
IMMT 150	Basic Cinematography & Editing .....4
IMMT 151	Audio Editing/Voiceover .....4
IMMT 111	Foundations of Media .....4
GRPH 113	Fundamentals of Layout & Storyboarding .....4
TOTAL CREDIT HOURS	.....19
Quarter 3	
COMM 105	Speech .....3
IMMT 152	Narrative Storytelling & Production .....4
IMMT 153	Formatting & Screenwriting for Audio & Video .....3
GRPH 243	Vector Illustration .....5
GRPH XXX	Digital Design Elective .....3
TOTAL CREDIT HOURS	.....18
Quarter 4	
ENGL 207	Writing for the Web .....3
BMGT 257	Project Management .....3
IMMT 158	Motion Graphics (After Effects) .....3
IMMT 216	Media Graphics & Optimization .....4
IMMT XXX	Technical Elective .....3
TOTAL CREDIT HOURS	.....17
Quarter 5	
SSCI100	Globalization & the Social Sciences .....5
IMMT 155	Foley Art and Sound Design .....4
IMMT 237	Basic Flash [Design] .....4
IMMT 240	Documentary Storytelling & Production .....4
IMMT 262	Web Publishing Site Design .....4
TOTAL CREDIT HOURS	.....21
Quarter 6	
IMMT 238	Intermediate Flash [Development] .....4
IMMT 249	Corporate/Instructional Video .....4
IMMT 251	Interactive Media Practicum .....4
IMMT 252	Interactive Media Seminar .....2
IMMT 260	DVD Development .....4
TOTAL CREDIT HOURS	.....18
TOTAL DEGREE CREDIT HOURS	.....110
ELECTIVES	
FOTO 111	Black and White Photography .....4
FOTO 114	Digital Photography .....4
GRPH 252	Advanced Digital Imaging .....4
MKTG 150	Introduction to e-Commerce .....3
MKTG 237	Database Marketing .....3
IMMT 250	Document Transfer Using Acrobat .....2
IMMT 239	Advanced Flash .....4
IMMT 297	Special Elective

Webtech Digital Design Certificate

COURSE	CR
Quarter 1	
IMMT 280 Adobe Flash – Basic Level	4
IMMT 282 Adobe Fireworks.....	4
IMMT 286 Adobe Illustrator	4
TOTAL CREDIT HOURS	12
Quarter 2	
IMMT 281 Adobe Flash – Intermedia Level.....	4
IMMT 283 Adobe Dreamweaver	4
IMMT 290 Adobe Photoshop & ImageReady.....	4
TOTAL CREDIT HOURS	12
Quarter 3	
IMMT 292 Adobe Acrobat Pro.....	4
IMMT 294 Adobe ColdFusion Basics.....	4
TOTAL CREDIT HOURS	8
TOTAL FOR CERTIFICATE	32

Interpreting/American Sign Language Education

Interpreting/American Sign Language Education Associate Degree American Sign Language/Deaf Studies Certificate

The Interpreting/ASL Education Associate Degree program prepares graduates for entry-level interpreting/ASL positions where persons who are deaf or hard of hearing and hearing persons must communicate with each other. The Associate Degree program offers extensive course work in American Sign Language. A language lab helps students develop their skills during six core skill-building courses. A three-quarter practicum gives students opportunities to gain first-hand experience applying their interpreting/transliterating skills and knowledge of professional ethics under the supervision of an agency interpreter.

To qualify for admission to the Associate Degree program, students must (1) have an entry-level knowledge of American Sign Language and deaf culture (equivalent to CSCC's ITT 141, 142, 130 and 111); (2) have a good command of spoken English; (3) agree to adhere to the Code of Ethics established by the Registry of Interpreters for the Deaf, Inc.; (4) attend a Mandatory Information Session conducted by the coordinator to complete an application form for the program; and (5) agree to complete a minimum number of ITT courses each quarter. Prior to acceptance into the Interpreting program, students may take any general education courses listed in the plan of study, and any courses listed in the ASL/Deaf Studies Certificate without permission of the ITT program coordinator.

The seven-quarter program is sequential, carefully integrating theory and skills with problem solving and critical thinking. Students must adhere to the Code of Ethics of the Registry of Interpreters for the Deaf (RID), or risk dismissal from the program. In order to ensure successful language learning, students are required to participate each quarter in activities and events outside of class time.

Upon completion of the Associate Degree in Interpreting/ASL Education, the graduate will be able to:

- Demonstrate unique skills required for interpreting in specialized settings (e.g., oral, medical, mental health, deaf-blind, etc.).
- Demonstrate an understanding of the interpreting/transliterating Code of Ethics
- Demonstrate basic competency with American Sign Language (ASL) as well as a basic understanding of signed English.
- Demonstrate ability to interpret spoken English messages into ASL, and ASL messages into spoken English.
- Demonstrate ability to transliterate spoken English messages into Manually Coded English, and Manually Coded English into spoken English.
- Explain the role of the interpreter/transliterating to both deaf and hearing consumers.
- Demonstrate knowledge of the deaf community and sensi-

- tivity toward the cultural traditions of the community.
- Assess the deaf consumer's preferred mode of communication.
- Analyze and adapt the physical aspects of the interpreting setting or be able to adapt to physical aspects that cannot be changed.
- Demonstrate knowledge of various agencies/organizations serving the deaf community.

The CSCC Interpreting/American Sign Language Education Program is approved by the State of Ohio Department of Education. Students who successfully complete the Interpreting/American Sign Language Education Associate Degree are eligible to apply for their Educational Interpreting License from the State of Ohio Department of Education.

Specific Program Admissions Information

Listed below are additional requirements for admission to Interpreting/ASL Education Program.

- High School graduate or GED equivalency
- Entry-level American Sign Language skills equivalent to CSCC's ASL I (ITT 141), ASL II (ITT 142), Fingerspelling (ITT 130), and Introduction to the Deaf Community (ITT 111) – all with a “C” or better.
ASL I and Introduction to the Deaf Community are offered aAutumn and Spring quarters; ASL II and Fingerspelling are offered Winter and Summer quarters. Individuals with ASL experience may meet this requirement by taking an ASL placement exam. Contact Alan Atwood at (614) 287-5164 for more information.
- COMPASS test placement into ENGL 101 – Beginning Composition or above, “No Reading Required, and MATH 102.
- Complete the form “Application to Become an Interpreting/ASL Education Major”. This form can ONLY be obtained from the coordinator during a Mandatory Information Session. Mandatory Information Sessions tend to be scheduled for early January and July. Contact the coordinator of the Interpreting/ASL Education program, Chris Evenson at (614) 287-5616, for dates and times of the next Mandatory Information Session.
- Submit all previous college and university transcripts to the Registrar's Office.
- Admitted with, and maintain, a minimum 2.0 GPA.

Students who go out-of-sequence may re-enter the Interpreting program providing space is available. Those students will be required to meet with an advisor, take applicable skills assessment exams, and follow the current year's Plan of Study for graduation.

Note: American Sign Language/Deaf Studies Certificate candidates do not need to attend a Mandatory Information Session.

Interpreting /ASL Education Associate Degree

Please check course descriptions for prerequisites to all courses in this curriculum.

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
CIT 101 PC Application 1	3
ITT 110 Introduction to Interpreting/Transliterating	3
ITT 150 Linguistics of ASL	3
ITT 143 American Sign Language III	5
TOTAL CREDIT HOURS	17

Quarter 2	
ENGL 102 Essay & Research	3
ITT 129 Current Research & Theory of Interpreting	3
ITT 144 American Sign Language IV	5
ITT 211 Transliterating I	3
TOTAL CREDIT HOURS	14

Quarter 3	
HUM 11X Humanities 111, 112, 113, 151, 152 or 224	5
ITT 145 American Sign Language V	5
ITT 201 Interpreting I	3
ITT 212 Transliterating II	3
TOTAL CREDIT HOURS	16

Quarter 4	
PSY 100 Introduction to Psychology OR	
SOC 101 Introduction to Sociology	5
ITT 120 Lexical Analysis & Development	3
ITT 149 Advanced ASL for Interpreters	2
ITT 202 Interpreting II	3
MULT 101 Medical Terminology	2
TOTAL CREDIT HOURS	15

Quarter 5	
COMM115 Oral Interpretation.....	3
ITT 292 Interpreting Practicum I	2
ITT 203 Interpreting III.....	3
ITT 220 Sign to Voice Interpreting/Transliterating	4
ITT XXX Technical Elective	3
TOTAL CREDIT HOURS	15

Quarter 6	
ENGL 200 Business Communications	3
NSCI 101 Natural Science	5
ITT 204 Interpreting IV	3
ITT 293 Interpreting Practicum II	3
ITT 290 Practicum Seminar II	1
TOTAL CREDIT HOURS	15

Quarter 7	
ECD 120 Interpersonal Communications	4
ITT 121 Legal & Ethical Aspects of Interpreting	3
ITT 123 Specialized Interpreting	3
ITT 294 Interpreting Practicum III	3
ITT 291 Practicum Seminar III	1
TOTAL CREDIT HOURS	14
TOTAL DEGREE CREDIT HOURS	106

Technical Electives (ITT) must be selected from the following:

ITT 170 Conversational ASL.....	2
ITT 171 Gesturing and Visual Readiness.....	1
ITT 172 History of the Deaf Community	2
ITT 173 Script Analysis and Translation	2
ITT 174 Religious Interpreting	3
ITT 175 Text Preparation & Analysis	3
ITT 265 Special Topics in Interpreting, ASL, Deaf Studies	1-5

American Sign Language/Deaf Studies Certificate

For those individuals wanting to learn about people who are deaf, their unique culture and community, and to be able to converse with them via American Sign Language (ASL), Columbus State offers a certificate program. This program does not prepare individuals to become interpreters; it is strictly a program to enhance/establish communication skills and to learn about deafness. Attending a Mandatory Information Session with the coordinator is not required; students simply register for the courses. Once all courses have been successfully completed, students apply for the certificate by contacting the Interpreting/ASL Education Coordinator. Individuals successfully completing the following eight courses (35 credit hours) must apply for their certificate within four quarters of completing ASL V.

For additional information about the American Sign Language/Deaf Studies Certificate, please see the Interpreting/ASL Education Program Coordinator. Individuals who have ASL experience may take an ASL placement test. Please contact Chris Evenson at (614) 287-5616 for more information.

* Registration for the following eight courses may be restricted to Interpreting/ASL Education majors for the first two weeks of registration. Seats not taken by majors will be released to any nonmajor students meeting the prerequisites 14 days after the first day of registration. Contact the coordinator for registration dates for nonmajors.

COURSE	CR
Quarter 1	
ITT 111 Introduction to the Deaf Community.....	5
ITT 141 American Sign Language I	5
TOTAL CREDIT HOURS	10
Quarter 2	
ITT 130 Fingerspelling	2
ITT 142 American Sign Language II	5
TOTAL CREDIT HOURS	7
Quarter 3	
ITT 150 Linguistics of ASL	3
ITT 143 American Sign Language III	5
TOTAL CREDIT HOURS	8
Quarter 4	
ITT 144 American Sign Language IV	5
TOTAL CREDIT HOURS	5
Quarter 5	
ITT 145 American Sign Language V	5
TOTAL CREDIT HOURS	5
TOTAL CERTIFICATE CREDIT HOURS.....	35

Landscape Design/Build

Landscape Design/Build Associate Degree

The Landscape Design/Build program prepares graduates for a wide range of careers with landscape design firms, materials wholesalers and retailers, commercial and private landscape facilities, and landscape contractors. Landscape Design/Build students learn plant selection, materials specification, landscape design, landscape construction estimating, and landscape maintenance procedures. Students in the program share common courses in surveying, soils, and drafting with other construction sciences students, giving the students a strong sense of the construction industry.

The Landscape Design/Build program provides students with a solid educational background in communication skills, math, computer literacy, operations, humanities, and behavioral sciences.

Upon completion of the Associate Degree in Landscape Design/Build, the graduate will be able to:

- Assist with the preparation of contract/design documents and construction specifications.
- Assist landscape professionals with the management and implementation of construction processes.
- Select suitable herbaceous and woody plants and properly install them.
- Estimate residential landscape project costs by utilizing take-off and costing methods.
- Be able to read and interpret plans and drawings.
- Assist in the survey and stake out of the job site.
- Create manual and/or computer generated designs of landscape projects.
- Create presentation materials using a variety of graphic techniques.
- Assist in the maintenance of both commercial and residential landscapes.
- Assist in the construction of landscapes and outdoor environments.
- Assist in the design and installation of irrigation systems.
- Identify common pests, diseases and problems as they relate to the landscape.

Landscape Design/Build Associate Degree

COURSE	CR
Quarter 1	
ARCH 110 Construction Drafting – Manual I (First Term)	2
ARCH 112 Construction Drafting – CAD I (Second Term).....	2
ENGL 101 Beginning Composition	3
LAND 101 Landscape Principles	3
LAND 111 Survey of Landscape Industry	2
MATH 104 Intermediate Algebra	5
TOTAL CREDIT HOURS	17
Quarter 2	
BIO 125 General Botany	5
ENGL 102 Essay & Research	3
LAND 102 Residential Landscape Design	4
LAND 107 Landscape Maintenance	3
SPAN 100 Spanish for the Professions.....	3
TOTAL CREDIT HOURS	18

Quarter 3		
LAND 152	Site Planning	4
HUM XXX	Humanities 111,112,113,151,152 or 224	5
LAND 105	Spring Landscape Plants	4
SURV 141	Basic Surveying	4
TOTAL CREDIT HOURS		17

Summer Quarter between 1st and 2nd year		
LAND 291	Field Experience	4
TOTAL CREDIT HOURS		4

Quarter 4		
LAND 205	Autumn Landscape Plants	4
LAND 206	Landscape Graphics	4
LAND 207	Landscape Construction	3
LAND 201	Landscape Pest Control.....	3
ENVR 120	Environmental Aspects of Soils.....	5
TOTAL CREDIT HOURS		19

Quarter 5		
BMGT 111	Management.....	5
COMM 105	Speech or COMM 110 Conf & Group Discussion	3
LAND 202	Planting Design	4
LAND 204	Turf Grass Management.....	3
LAND 203	Landscape Irrigation	3
TOTAL CREDIT HOURS		18

Quarter 6		
ENGL 204	Technical Writing	3
LAND 108	Herbaceous Plants	3
LAND 222	Landscape Operations	4
SSCI XXX	Social Science 100, 101, 102, 104 or 105.....	5
XXXX XXX	Technical Elective	2-4
TOTAL CREDIT HOURS		17-19
TOTAL DEGREE CREDIT HOURS		110

Technical Elective must be selected from the following list of courses:

CIT 101	PC Application 1	3
ARCH 113	Architectural Drafting - CAD II	2
LAND 100*	The American Landscape.....	2
LAND 104	Specialty Gardens	3
LAND 109	Landscape Arboriculture	3
LAND 110	Landscape Computer Applications	3
LAND 117	Landscape Maintenance Laboratory	2
LAND 208	Interior Plants	3
LAND 210	Evergreen Landscape Plants	4
LAND 217	Landscape Construction Laboratory.....	2
LAND 295, 296, 297*	Special Topics	1-5

* Does not count for Technical Electives

Law Enforcement

Law Enforcement Associate Degree Corrections Major

Law Enforcement Major

Law Enforcement Management Major

Law Enforcement Major – Academy Track

Persons trained for the law enforcement field are in high demand in many public and private organizations. Columbus State’s Law Enforcement program teaches students the technical skills they need to enter or advance in a wide variety of positions in criminal justice. Four associate degree majors give students a range of options to meet their personal career goals.

The Law Enforcement major prepares students for a variety of careers in federal, state, or local law enforcement agencies. The Law Enforcement Major – Academy Track offers additional training required by the Ohio Peace Officers Training Council (OPOTC) for certified peace officers. Graduates of the Academy track are eligible to take the OPOTC certification exam.

The Law Enforcement Management major is intended for students who currently possess Ohio Peace Officer Certification or an Associate Degree or higher. At least one year of law enforcement work is highly recommended before entering. This major is designed to prepare in-service officers to assume managerial positions within law enforcement agencies.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Academy Track Program. Applicants must:

- Have a high school diploma or GED certificate.
- Pass a physical.
- Take a personality factor inventory.
- Submit to a criminal history check (students with prior felony convictions may be excluded from the program; contact the department chairperson for more information).
- Possess a valid Ohio driver's license.
- Complete a supplemental application required by the department.

The Corrections major trains students for careers in probation, parole, correctional institutions, community-based correctional programs, and social service agencies.

Upon completion of the Associate Degree in Law Enforcement, the graduate will be able to:

- Locate and apply criminal law correctly.
- Prepare required reports accurately and in a concise, readable style.
- Prepare cases for trial and professionally testify in a court of law.

Corrections Major

In addition to the general Law Enforcement competencies, a graduate majoring in Corrections will be able to:

- Prepare pre-sentence reports and other required reports accurately.
- Demonstrate knowledge of effective correctional institution security measures.

Law Enforcement Major

In addition to the general Law Enforcement competencies, a graduate majoring in Law Enforcement will be able to:

- Demonstrate proper arrest procedures.
- Locate applicable case law.
- Process information at an accident scene and correctly complete required reports.
- Identify hazardous materials and initiate proper response.

Law Enforcement Management Major

In addition to the general Law Enforcement competencies, a graduate majoring in Law Enforcement Management will be able to:

- Develop contingency plans for emergencies or other events requiring rapid and/or extensive deployment of police resources.
- Effectively utilize research in reaching managerial decisions.
- Prepare a community policing strategy to meet the needs of a specific neighborhood.
- Participate in a collective bargaining process.
- Recognize areas of potential legal liability and prepare policies, directives and training programs to minimize exposure to litigation.
- Demonstrate effective managerial decision-making skills.

Law Enforcement Major – Academy Track

In addition to the general Law Enforcement competencies, and the Law Enforcement major competencies, a graduate majoring in Law Enforcement – Academy Track will be able to:

- Understand and handle safely the double-action revolver, the semi-automatic pistol, and the shotgun.
- Demonstrate proficiency with the handgun and shotgun to current Ohio Peace Officer Training Council (OPOTC) standards for qualification.
- Perform safe and effective driving maneuvers to current OPOTC standards.
- Demonstrate basic crowd control techniques and riot formations.
- Demonstrate recommended self-defense techniques.

Corrections Major

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
LAW 101	Introduction to Criminal Justice .....3
LAW 104	Government and the Law .....3
LAW 120	Criminology .....3
CIT 101	PC Applications 1 .....3
TOTAL CREDIT HOURS	.....15

Quarter 2

ENGL 102	Essay & Research .....3
LAW 208	Community Based Corrections .....3
MATH 101	Business Mathematics .....5
ANTH 240	Forensic Anthropology .....5
LAW 204	Juvenile Procedures .....3
TOTAL CREDIT HOURS	.....19

Quarter 3

COMM 105	Speech .....3
LAW 121	Juvenile Delinquency .....3
LAW 124	Penology .....3
SSCI 101	Cultural Diversity .....5
LAW XXX	Law Enforcement Elective .....3
TOTAL CREDIT HOURS	.....17

Quarter 4

LAW 268	Hazardous Materials .....3
LAW 212	Ohio Criminal Code .....4
LAW 110	Criminal Investigation I .....4
LAW 210	Crisis Intervention .....3
LAW 128	Special Category Offenders .....3
TOTAL CREDIT HOURS	.....17

Quarter 5

ENGL 204	Technical Writing OR
ENGL 200	Business Communications .....3
LAW 112	Criminal Investigation II .....4
LAW 219	Correctional Law .....4
LAW 211	Institutional Corrections .....3
NSCI 101	Natural Science I .....5
TOTAL CREDIT HOURS	.....19

Quarter 6

HUM XXX	Humanities 111, 112, 113, 151, 152 or 224 .....5
LAW 221	Counseling–Probation & Parole .....4
LAW 223	Correctional Administration .....3
LAW 256	L.E. Practicum .....2
LAW 257	L.E. Practicum Seminar .....1
LAW 271	Contemporary Issues in CJ .....3
TOTAL CREDIT HOURS	.....18
TOTAL DEGREE CREDIT HOURS	.....105

Technical Electives must be selected from the following list of courses:

LAW 102	Patrol Procedures .....3
LAW 111	Criminalistics I .....3
LAW 115	Community & Personal Relations .....3
LAW 220	Constitutional Law .....4
LAW 241	Correctional Internship I AND .....1
LAW 249	Corrections Seminar II .....1
LAW 252	Police Administration .....3
LAW 253	Criminal Procedure .....3
LAW 260	Criminal Evidence & Trial .....3
LAW 299	Special Topics in Law Enforcement 3 .....3
LAW 215	Cyberlaw .....3
SPAN 100	Survival Spanish for the Workplace .....3

Law Enforcement Major

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
LAW 101	Introduction to Criminal Justice .....3
LAW 104	Government and the Law .....3
LAW 120	Criminology .....3
LAW 253	Criminal Procedure .....3
LAW 102	Patrol Procedures .....3
TOTAL CREDIT HOURS	.....18

Quarter 2		
ENGL 102	Essay & Research	3
CIT 101	PC Applications 1	3
LAWE 115	Community & Personal Relations	3
MATH 101	Business Mathematics	5
	OR	
MATH 102	Beginning Algebra	4
LAWE 204	Juvenile Procedures	3
TOTAL CREDIT HOURS		16 - 17

Quarter 3		
COMM 105	Speech	3
LAWE 125	Traffic Accident Investigation	3
LAWE 252	Police Administration	3
SSCI 101	Cultural Diversity	
	OR	
ANTH 240	Forensic Anthropology	5
LAWE 271	Contemporary Issues in Criminal Justice	3
TOTAL CREDIT HOURS		17

Quarter 4		
LAWE 110	Criminal Investigation I	4
LAWE 268	Hazardous Materials	3
LAWE 212	Ohio Criminal Codes	4
LAWE 111	Criminalistics I	3
LAWE 210	Crisis Intervention	3
TOTAL CREDIT HOURS		17

Quarter 5		
ENGL 204	Technical Writing	
	OR	
ENGL 200	Business Communications	3
LAWE 112	Criminal Investigation II	4
NSCI 101	Natural Science I	
	OR	
CHEM 111	Elem. Chemistry	5
LAWE 260	Criminal Evidence & Trial	3
LAWE XXX	Law Enforcement Electives	3
TOTAL CREDIT HOURS		18

Quarter 6		
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
LAWE 220	Constitutional Law	3
EMS 100	Crash Injury Management	2
LAWE 136	Terrorism	3
LAWE 256	LE Practicum I	2
LAWE 257	LE Practicum Seminar I	1
LAWE XXX	Law Enforcement Elective	3
TOTAL CREDIT HOURS		19
TOTAL DEGREE CREDIT HOURS		106

Technical Electives must be selected from the following list of courses:

LAWE 113	Criminalistics II	3
LAWE 121	Juvenile Delinquency	3
LAWE 124	Penology	3
LAWE 128	Special Category Offender	3
LAWE 205	Contemporary Corrections	3
LAWE 208	Community Based Corrections	3
LAWE 211	Institutional Corrections	3
LAWE 219	Correctional Law	3
LAWE 221	Counseling Probation and Parole	4
LAWE 223	Correctional Administration	3
LAWE 260	Criminal Evidence and Trial	3
LAWE 299	Special Topics in Law Enforcement	3
LAWE 215	Introduction to Cyberlaw	3
SPAN 100	Survival Spanish for the Workplace	3
LAWE 276	Criminalistics III	3

Law Enforcement Management Major

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
LAWE 104	Government and the Law	3
LAWE 120	Criminology	3
LAWE 150	Administration of Justice	3
LAWE 252	Police Administration	3
TOTAL CREDIT HOURS		15

Quarter 2		
ENGL 102	Essay and Research	3
CIT 101	PC Applications 1	3
MATH 101	Business Math	5
LAWE 155	Managing Police Operations	4
LAWE 218	Supervision of Public Service Personnel	3
TOTAL CREDIT HOURS		18

Quarter 3		
COMM 105	Speech	3
HRM 121	Human Resources Management	4
LAWE 153	Civil Liability in Law Enforcement	4
SSCI 103	Social Problems	5
TOTAL CREDIT HOURS		16

Quarter 4		
HRM 220	Labor Relations	5
LAWE 273	Legal Computing	2
LAWE 232	Task Force/Major Case Management	3
ACCT 106	Introduction to Accounting	5
TOTAL CREDIT HOURS		15

Quarter 5		
ENGL 200	Business Communications	
	OR	
ENGL 208	Communications for Mass Media	3
LAWE XXX	Law Enforcement Elective	3
LAWE 231	Criminal Justice Plan and Analysis	3
LAWE 220	Constitutional Law	3
NSCI 101	Natural Science I	5
TOTAL CREDIT HOURS		17

Quarter 6		
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
LAWE XXX	Law Enforcement Elective	3
LAWE 242	Community Policing	4
LAWE 275	Police Management Assessment	4
LAWE 271	Contemporary Issues in Criminal Justice	2
LAWE 136	Terrorism	3
TOTAL CREDIT HOURS		21
TOTAL DEGREE CREDIT HOURS		102

Technical Electives must be selected from the following list of courses:

LAWE 243	Forensic Science for Law Enforcement Managers	3
LAWE 244	Budget & Grant Writing for Criminal Justice Administrators	3
LAWE 245	Media and the Police	3
ANTH 240	Forensic Anthropology	5
LAWE 215	Cyberlaw	3
SPAN 100	Survival Spanish for the Workplace	3

Law Enforcement Major – Academy Track

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
LAWE 101	Introduction to Criminal Justice	3
LAWE 104	Government and the Law	3
LAWE 120	Criminology	3
LAWE 253	Criminal Procedure	3
TOTAL CREDIT HOURS		15

Quarter 2		
ENGL 102	Essay and Research	3
MATH 101	Business Mathematics	5
LAWE 204	Juvenile Procedures	3
SSCI 101	Cultural Diversity OR	5
SOC 101	Introduction to Sociology	5
TOTAL CREDIT HOURS	.....	16

Quarter 3		
COMM 105	Speech	3
NSCI 101	Natural Science I	5
CIT 101	PC Applications 1	3
LAWE 124	Penology	3
TOTAL CREDIT HOURS	.....	14

Quarter 4		
LAWE 111	Criminalistics I	3
LAWE 271	Contemporary Issues in Law Enforcement	3
SPAN 100	Survival Spanish for the Workplace.....	3
LAWE 136	Terrorism	3
TOTAL CREDIT HOURS	.....	12

Quarter 5		
ENGL 200	Business Communications OR	
ENGL 204	Technical Writing	3
LAWE 256	LE Practicum I	2
LAWE 257	LE Practicum Seminar I	1
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
LAWE 260	Criminal Evidence and Trial.....	3
TOTAL CREDIT HOURS	.....	14

Quarter 6		
LAWE 110*	Criminal Investigation I	4
LAWE 220*	Constitutional Law	3
LAWE 102*	Patrol Procedures	3
LAWE 125*	Traffic Accident Investigation	3
LAWE 265 *	Police Physical Fitness	3
LAWE 210 *	Crisis Intervention	3
TOTAL CREDIT HOURS	.....	19

Quarter 7		
LAWE 264*	Police Firearms	3
LAWE 263*	Arrest and Control	3
LAWE 212*	Ohio Criminal Codes	4
LAWE 112*	Criminal Investigation II	4
LAWE 115*	Community & Personal Relations	3
LAWE 261*	Defensive Driving and Emergency Response.....	2
TOTAL CREDIT HOURS	.....	19
TOTAL DEGREE CREDIT HOURS	.....	108

*These classes contain Student Performance Objectives and attendance must be maintained.

Technical Elective must be selected from the following list of courses:

LAWE 113	Criminalistics II	3
LAWE 121	Juvenile Delinquency	3
LAWE 124	Penology	3
LAWE 128	Special Category Offender	3
LAWE 205	Contemporary Corrections	3
LAWE 208	Community Based Corrections	3
LAWE 211	Institutional Corrections	3
LAWE 219	Correctional Law	3
LAWE 221	Counseling Probation and Parole	4
LAWE 223	Correctional Administration	3
LAWE 299	Special Topics in Law Enforcement	3
LAWE 215	Cyberlaw	3

Logistics (See Supply Chain Management)

Marketing

- Marketing Associate Degree**
- Direct Marketing Major**
- Direct Marketing Certificate**
- Retail Management Major**
- Pre-MBA Certificate**

Marketing is at the heart of what every business must do to be successful: get and keep customers. Marketing professionals are responsible for knowing how to produce, price, promote, and distribute goods and services. Program graduates enjoy career opportunities in such diverse areas as product management, advertising, market research, public relations, Web-based businesses, customer service and sales.

The Marketing program provides a strong foundation in fundamental marketing concepts and principles. The advanced courses provide the opportunity for studying topics of particular interest to the student in such areas as consumer behavior, public relations, and advanced sales techniques. All of the courses in the Marketing Associate Degree program can be completed in both a traditional and distance learning option. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at our main campus and off-campus locations. The distance learning option provides the same high quality learning as traditional instruction, with the flexibility of being able to complete coursework online or through video based instruction

The Direct Marketing and Retail Management majors build on a solid foundation in marketing to provide advanced skills in these specialized areas. The Direct Marketing major provides graduates with a survey of the major components of direct marketing including creative design, list selection, database management, and financial evaluation of direct marketing programs. Particular emphasis is placed on interactive technologies and their impact on direct marketing. The Retail Management major provides in-depth exposure to retail management principles and a strong internship program supported by many of the city's leading retail operations.

The MBA (Master of Business Administration) is one of the most sought-after professional degrees—not only by those currently working in business but also by many other professionals who are increasingly in need of these types of skills. The Pre-MBA Certificate is designed for individuals who have already completed a baccalaureate degree and wish to pursue an MBA or for professionals in various fields who wish a basic grounding in business principles through an introduction to the business disciplines. All of the courses in this certificate can be completed online. For more information, access the Pre-MBA Web site at <http://www.csc.edu/premba>.

Transfer agreements are available that enable Marketing graduates to transfer to other institutions to complete their baccalaureate degree. Please contact advisor if interested in this option.

Columbus State Community College is nationally accredited by the Association of Collegiate Business Schools and Programs (ACBSP) for the offering of its business programs that culminate in the Associate of Arts, Associate of Science, and Associate of Applied Science Degrees.

Upon completion of the Associate Degree in Marketing, the graduate will be able to:

- Demonstrate knowledge of the issues involved in making marketing decisions and the environmental forces that impact these decisions.
- Demonstrate knowledge of the major communications tools used in marketing with particular emphasis on developing a creative brief.
- Understand the market research process and be able to develop valid market research instruments.
- Demonstrate knowledge of how consumer behavior impacts overall marketing strategy and influences the purchaser's decision buying process.
- Comprehend the sales process and understand how it relates to consumer and business-to-business purchasing.
- Identify issues that arise in global marketing and describe the basic mechanisms for doing business in foreign markets.
- Understand various consumer and industrial systems of distribution and supply chain management.
- Demonstrate the interpersonal and supervisory skills necessary for successful communication among employees and between customer service and customers.
- Describe the logistics of dealing with suppliers, merchandise handling, inventory control, and all phases of basic store operations.
- Participate in the development of a comprehensive direct marketing campaign.
- Describe the components of successful e-Commerce business model and their interrelationship.
- Understand the Internet and its business marketing functionality and demonstrate how its relationship to traditional marketing activity.
- Understand the role of ethical decision making in the business world.

Direct Marketing Major

In addition to the Marketing competencies, a graduate with a Direct Marketing major will be able to:

- Define and develop a target market and select the most appropriate methods to reach it.
- Select and use the appropriate methodology to assess the costs of direct marketing efforts.
- Understand and be able to utilize interactive direct marketing media.
- Plan and implement telemarketing campaigns for purposes of direct selling, fund-raising, and business-to-business sales.
- Integrate creative activities and outcomes with appropriate direct marketing techniques.

Retail Management Major

In addition to the Marketing competencies, a graduate with a Retail Management major will be able to:

- Explain all facets of the buying and selling of merchandise.
- Exhibit knowledge of merchandise management including planning, control, and evaluation of the merchandise mix.
- Identify the various types of stock control systems.
- Perform the various functions of store operations.
- Develop and execute sales promotion activities including merchandise presentations.
- Describe the logistics of dealing with suppliers, merchandise handling, receiving, and stocking.
- Demonstrate an understanding of all phases of basic store operations.
- Demonstrate an understanding of consumer buying behavior and the psychological factors influencing a customer's decision as to where to shop.
- Comprehend retail information systems and demonstrate the ability to use the data productively in problem solving and decision making.
- Demonstrate an understanding of mathematical tools that aid in merchandise planning, selection, and pricing.

Marketing Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
MATH 103 Beginning Algebra II	4
MKTG 111 Marketing Principles	5
BMGT 257 Project Management	3
IMMT 122 Foundations of Digital Media	4
TOTAL CREDIT HOURS	19
Quarter 2	
ENGL 102 Essay and Research	3
MKTG 140 Introduction to Advertising & Promotion	4
MKTG102 Branding.....	3
MKTG 145 Services Marketing.....	3
ACCT 106 Introduction to Accounting I.....	5
TOTAL CREDIT HOURS	18
Quarter 3	
COMM 105 Speech	3
ACCT 107 Introduction to Accounting II	5
MKTG 101 Introduction to Retailing OR	
LOGI 100 Principles of Supply Chain Management	5
MKTG 131 Market Research Principles	3
MKTG 141 Integrated Marketing Communications	4
TOTAL CREDIT HOURS	20
Quarter 4	
ENGL 200 Business Communication	3
HUM XXX Humanities 111,112,113,151,152 or 224	5
MKTG 221 Consumer Behavior	3
MKTG 229 Organizational Marketing	3
MKTG 122 Business & Internet.....	3
TOTAL CREDIT HOURS	17
Quarter 5	
MKTG 226 Customer Service Principles & Practices	4
MKTG 223 Sales Principles & Practices.....	4
MKTG 236 Direct Marketing	3
NSCI 101 Natural Science I	5
ECON 200 Microeconomics.....	5
TOTAL CREDIT HOURS	21

Quarter 6

MKTG 270	Global Marketing/IBPF	6
MKTG 241	Marketing Practicum I	4
MKTG 242	Marketing Seminar I	2
MKTG XXX	Approved Elective	3
TOTAL CREDIT HOURS		15
TOTAL DEGREE CREDIT HOURS		109

Technical Electives

Any advisor approved courses from the following list can be used for the Marketing Elective:

GRPH 284	Advertising Agency I	4
HRM 121	Human Resources Management	4
MKTG 142	Media Buying	3
MKTG 146	Nonprofit Marketing	3
MKTG 145	Services Marketing	3
MKTG 224	Public Relations	3
MKTG 237	Database Marketing	3
MKTG 251	Practicum II	4
MKTG 252	Seminar II	2
MKTG 285	Advertising/Promotion on the Web	1
MKTG 286	Customer Service on the Web	1
MKTG 287	Public Relations on the Web	1
MKTG 288	Market Research on the Web	1
MKTG 289	Direct Marketing on the Web	1
MKTG 290	Government Marketing on the Web	1
MKTG 292	Nonprofit Marketing Using the Web	1

Direct Marketing Major

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
MATH 103	Beginning Algebra II	4
MKTG 111	Marketing Principles	5
BMGT 257	Project Management	3
IMMT 122	Foundations of Digital Media	4
TOTAL CREDIT HOURS		19

Quarter 2

ENGL 102	Essay and Research	3
MKTG 102	Branding	3
MKTG 140	Introduction to Advertising & Promotion	4
MKTG 122	Business & the Internet	3
MKTG 226	Customer Service Principles & Practices	4
MKTG 229	Organizational Marketing	3
TOTAL CREDIT HOURS		20

Quarter 3

ACCT 106	Introduction to Accounting I	5
MKTG 101	Introduction to Retailing or	
LOGI 100	Principles of Supply Chain Management	5
MKTG 131	Market Research Principles	3
MKTG 141	Integrated Marketing Communications	5
NSCI 101	Natural Science I	5
TOTAL CREDIT HOURS		23

Quarter 4

COMM 105	Speech	3
ENGL 200	Business Communication	3
ACCT 107	Introduction to Accounting II	5
MKTG 221	Consumer Behavior	3
MKTG 236	Direct Marketing Principles	3
MKTG XXX	Elective	3
TOTAL CREDIT HOURS		20

Quarter 5

MKTG 263	Direct Marketing Creative & Financial Analysis	4
MKTG 237	Database Marketing	3
ECON 200	Microeconomics	5
HUM XXX	Humanities 111,112,113,151,152 or 224	5
TOTAL CREDIT HOURS		17

Quarter 6

MKTG 241	Marketing Practicum I	4
MKTG 242	Marketing Seminar I	2
MKTG 270	Global Marketing/IBPF	6
TOTAL CREDIT HOURS		12
TOTAL DEGREE CREDIT HOURS		102

Technical Electives

Any course from the following list can be used to fulfill the marketing elective requirement:

MATH 135	Statistics	5
MKTG 142	Media Buying	3
MKTG 146	Nonprofit Marketing	3
MKTG 150	Introduction to e-Commerce	3
MKTG 224	Public Relations	3
MKTG 285	Advertising & Promotion on the Web	1
MKTG 286	Customer Service on the Web	1
MKTG 287	Public Relations on the Web	1
MKTG 288	Market Research on the Web	1
MKTG 289	Direct Marketing on the Web	1
MKTG 290	Government Marketing on the Web	1
MKTG 292	Nonprofit Marketing Using the Web	1
HRM 121	Human Resources Management	4

Direct Marketing Certificate

COURSE		CR
Quarter 1		
MKTG 236	Direct Marketing	3
Quarter 2		
MKTG 237	Database Marketing	3
MKTG 263	Direct Marketing Creative & Financial Analysis	4
Quarter 3		
MKTG 122	Business and the Internet	3
TOTAL CERTIFICATE CREDITS		13

Retail Management Major

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
MATH 103	Introduction to Algebra II	4
MKTG 101	Introduction to Retailing	5
MKTG 111	Marketing Principles	5
IMMT 122	Foundations of Digital Media	4
TOTAL CREDIT HOURS		21

Quarter 2

ENGL 102	Essay & Research	3
BMGT 257	Project Management	3
MKTG 102	Branding	3
MKTG 223	Sales Principles & Practices	4
ACCT 106	Introduction to Accounting I	5
MKTG 150	Introduction to e-Commerce	3
TOTAL CREDIT HOURS		21

Quarter 3

COMM 105	Speech	3
ACCT 107	Introduction to Accounting II	5
MKTG 131	Market Research	3
MKTG 140	Introduction to Advertising & Promotion	4
MKTG 205	Quantitative Methods in Retail	5
TOTAL CREDIT HOURS		20

Quarter 4

HUM XXX	Humanities 111, 112, 113, 151, 152, 154	5
BMGT 218	Management Training for Supervisors	5
MKTG 141	Integrated Marketing Communications	4
MKTG 226	Customer Service Principles & Practices	4
TOTAL CREDIT HOURS		18

Quarter 5		
ENGL 200	Business Communication	3
MKTG 270	Global Marketing/IBPF	6
NSCI 101	Natural Science I	5
MKTG XXX	Approved Electives	3
TOTAL CREDIT HOURS		17

Quarter 6		
MKTG 241	Marketing Practicum I	4
MKTG 242	Seminar in Marketing I	2
MKTG 213	Merchandise Buying and Management	4
TOTAL CREDIT HOURS		10
TOTAL DEGREE CREDIT HOURS		107

Approved Electives		
MKTG 142	Media Buying	3
MKTG 146	Nonprofit Marketing	3
MKTG 145	Services Marketing	3
MKTG 236	Direct Marketing	3
MKTG 237	Database Marketing	3
MKTG 285	Advertising & Promotion on the Web	1
MKTG 290	Government Marketing on the Web	1
MKTG 292	Nonprofit Marketing Using the Web	1
LOGI 100	Principles of Supply Chain Management	5

Pre-MBA Certificate

COURSE		CR
Quarter 1		
ACCT269	Foundations of Accounting ¹	5
FMGT201	Business Finance	5
Quarter 2		
BMGT111	Management	5
ECON200	Principles of Microeconomics ¹	5
Quarter 3		
MATH135	Elementary Statistics ¹	5
MKTG111	Principles of Marketing	5
TOTAL CERTIFICATE CREDITS		30

NOTE: Individuals who have completed one or more of the above courses can substitute the following:

LEGL261	Business Law I	3
LOGI100	Principles of Supply Chain Management	5
ECON240	Principles of Macroeconomics	5
BMGT257	Project Management	3

¹Students must meet the prerequisite requirements before enrolling in these classes. These prerequisites can be completed by taking Math 102 for Accounting and Economics and Math 103 for Statistics with a grade of "C" or better.

Massage Therapy

Massage Therapy Associate Degree Massage Therapy Certificate

The Massage Therapy program meets all requirements to sit for the State of Ohio Medical Board examination for Massage Therapy. It prepares the students to work in the massage therapy field in but not limited to: health and fitness environments, salon and day spas, medical offices, private practices and many other opportunities.

Upon completion of the Associate Degree in Massage Therapy, the graduate will be able to:

- Demonstrate and be able to perform soft tissue manipulation techniques which may be appropriate for the use in the treatment of disorders of the human body.
- Effectively communicate the beneficial effects of massage to patients.
- Demonstrate the ability to assess and appropriately treat disorders of the human body, which may benefit from massage.
- Display an understanding and demonstrate the ability to establish and maintain appropriate patient and business records.
- Display an understanding of skills necessary to establish and operate a massage therapy practice or integrate into a multi-disciplinary environment.
- Demonstrate the ability to communicate effectively with other health care providers as to the advisability of massage.
- Display an understanding of and demonstrate the effective use of complimentary therapeutic modalities in the treatment of ailments of the human body.
- Display an understanding of, and effectively educate patients in the proper care and prevention of musculoskeletal injuries.
- Demonstrate an understanding of the State Medical Board of Ohio acceptable ethical standards, scope of practice and standards of practice.
- Demonstrate the ability to provide ethical care for their patients.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Massage Therapy Degree Program:

- High school graduate or GED equivalency
- Placement into ENGL 101 – Beginning Composition
- Placement into MATH 101 – Business Math
- Student must obtain a Certificate of Preliminary Education from the State Medical Board of Ohio

Massage Therapy Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
HIMT 121 Advanced Medical Terminology	3
BIO 261 Human Anatomy	5
MULT 171 Current Issues in HIV	1
TOTAL CREDIT HOURS	12

Quarter 2	
MASS 271 Massage Anatomy & Physiology I	5
MASS 261 Massage Techniques I	6
MASS 235 Massage Law and Business Principles	4
TOTAL CREDIT HOURS	14

Quarter 3	
MASS 236 Medical Ethics for Massage Therapist	3
MASS 262 Massage Techniques II	6
MASS 272 Massage Anatomy & Physiology II	5
TOTAL CREDIT HOURS	14

Quarter 4	
MASS 292 Massage Practicum I	5
MASS 273 Massage Anatomy & Physiology III	5
TOTAL CREDIT HOURS	10

Quarter 5	
MASS 294 Massage Practicum II	5
MASS XXX Massage Elective Course	2-5
MASS 274 Massage Anatomy and Physiology IV	5
TOTAL CREDIT HOURS	12-15

Quarter 6	
NURC 176 Fundamentals of Herbology	4
ENGL 102 Essay & Research	3
HUM XXX Humanities 111, 112, 113, 151, 152 or 224	5
TOTAL CREDIT HOURS	12

Quarter 7	
SSCI XXX 100, 101, 102, 104, 105	5
ENGL 200 Business Communications	3
MATH 101 Business Math	5
TOTAL CREDIT HOURS	13

Quarter 8	
MASS 298 Special Topics in Massage	3
COMM 105 Speech	3
NURC 190 Holistic Interventions for Health Care Practitioners	2
TOTAL CREDIT HOURS	10

TOTAL DEGREE CREDIT HOURS 95-100
Students should request a plan of study from their faculty advisor.

Massage Therapy Certificate

Specific Program Admissions Information

Listed below are prerequisite requirements for admission to the Massage Therapy Certificate Program. Student must obtain a Certificate of Preliminary Education from the State Medical Board of Ohio.

PREREQUISITE COURSES:

Placement into ENGL 101	
HIMT 121 Advanced Medical Terminology	3
BIO 261 Human Anatomy	5
MULT 171 Current Issues in HIV	1

COURSE	CR
Quarter 1	
MASS 261 Massage Technique I	6
MASS 271 Massage Anatomy & Physiology I	5
TOTAL CREDIT HOURS	11

Quarter 2	
MASS 262 Massage Technique II	6
MASS 272 Massage Anatomy & Physiology II	5
MASS 235 Massage Law and Business Principles	4
TOTAL CREDIT HOURS	14

Quarter 3

MASS 236	Medical Ethics for Massage Therapists	3
MASS 273	Massage Anatomy & Physiology III	5
MASS 292	Massage Practicum I	5
TOTAL CREDIT HOURS	.....	13

Quarter 4

MASS XXX	Massage Elective Course.....	2-5
MASS 294	Massage Practicum II	5
MASS 274	Massage Anatomy and Physiology IV.....	5
TOTAL CREDIT HOURS	.....	12-15
TOTAL CERTIFICATE CREDIT HOURS	.....	50-53

Technical Electives for Massage Therapy Associate of Applied Science Degree Program and Massage Therapy Certificate Program

MASS 298	Special Topic in Massage Therapy	2
MULT 103	Responding to Emergencies.....	2
NURC 175	Principles of Homeopathy.....	4
NURC 176	Fundamentals of Herbology.....	4
NURC 190	Holistic Interventions for Health Care Practitioners.....	2
SES 231	Exercise Physiology.....	5
SES 241	Kinesiology.....	5

Students must receive a letter grade of "C" or better in all massage therapy course work.

Mechanical Engineering Technology Associate Degree

Individuals who are mechanically inclined and like to solve problems can have a satisfying career in the field of engineering that creates machines to work for people: mechanical engineering.

Columbus State's Mechanical Engineering Technology program prepares students to enter this growing profession where the pool of applicants does not meet the demand. The program presents an inside look at the manufacturing process, as well as highlights skills with drafting, computers, and troubleshooting. Coursework includes an introduction to manufacturing technology, hydraulics, robotics, materials science, and computer aided drafting and manufacturing. Students get their hands on the College's Solar Car and be can be part of the team to design the next winner of the Society of Automotive Engineers MiniBaja® competition.

Graduates be qualified to assist engineers in the industrial, consulting, scientific research, and consulting communities—or to transfer to a four-year college to pursue a Bachelor of Science in Engineering degree.

Engineering technology teaches students how to organize thoughts and approach problems—which is not only critical to their work, but also beneficial in life. The skills learned can take graduates anywhere—from designing better helmets for the NFL to better wheelchairs for the handicapped.

Mechanical Engineering Technology Associate Degree

COURSE	CR	
Quarter 1		
MATH 111	Technical Math I	4
MECH 111	Manufacturing Processes	4
ENGL 101	Beginning Composition	3
MECH 112	Computer Applications in Manufacturing	3
ENGT 100	Introduction to Engineering Technology	3
TOTAL CREDIT HOURS	.....	17
Quarter 2		
MATH 112	Technical Math II	4
PHYS 181	Physics (Mechanics)	4
EET 103	Investigating Electricity.....	4
MECH 120	Mechanical Drafting I	3
TOTAL CREDIT HOURS	.....	15
Quarter 3		
ENGL 102	Essay and Research	3
COMM 105	Speech	3
MATH 135	Elementary Statistics.....	5
MECH 131	Hydraulics	3
MECH 250	Materials Science	3
TOTAL CREDIT HOURS	.....	17
Quarter 4		
ENGL 204	Technical Writing	3
MECH 240	Machine Tools	4
MECH 251	Computer Aided Drafting I	3
MECH 243	Robotics	3
MECH 130	Statics.....	3
TOTAL CREDIT HOURS	.....	16

Quarter 5	
HUM XXX	Humanities 111,112,113,151, 152 or 224 .....5
MECH 252	Computer Programming for Technicians .....3
MECH 253	Numerical Control .....3
MECH 244	Statistical Process Control .....3
MECH 242	Strength of Materials .....3
MECH 262	Computer Aided Drafting II .....3
TOTAL CREDIT HOURS	.....20

Quarter 6	
SSCI XXX	Social Science 100,101, 102, 104, or 105 .....5
MECH 260	Basic Mechanisms .....4
MECH 261	Machine Design .....4
MECH 263	Computer Aided Manufacturing .....4
MECH 264	Computer Aided Drafting III .....3
TOTAL CREDIT HOURS	.....20
TOTAL DEGREE CREDIT HOURS	.....105

Medical Assisting

Medical Assisting Associate of Technical Studies Medical Assisting Certificate

The Medical Assisting program prepares graduates to work as medical assistants primarily in ambulatory settings such as medical offices and clinics. Medical assistants are multi-skilled professionals who assist in patient care management. They perform a broad range of clinical and administrative duties, including scheduling and receiving patients, establishing and maintaining medical records, handling telephone calls, completing correspondence, processing insurance claims, and managing finances. Medical assistants are a valuable member of the health-care team, and job opportunities are numerous in central Ohio and nationwide. Graduates of the program are eligible to take the National Certification examination which is administered three times a year.

Upon completion of the Certificate Program in Medical Assisting, the graduate will be able to:

- Perform clerical functions to include execution of bookkeeping principles and special accounting entries.
- Process insurance claims including the application of managed care policies and diagnostic and procedural coding.
- Identify medical/legal issues within the medical office, respecting confidentiality and documenting appropriately in the medical record.
- Perform risk-management procedures and patient instruction for follow-up care health maintenance and disease prevention.
- Properly handle and dispose of infectious waste and biohazard materials in compliance with government regulations.
- Perform and collect various specimens in compliance with Standard Precautions set forth by the Centers for Disease Control and Prevention.
- Perform various diagnostic tests ordered by the physician, utilizing quality control procedures.
- Conduct various patient care procedures including preparation and administration of oral and parenteral medications.
- Maintain and perform inventory of administrative and clinical supplies and equipment following office policy.

Specific Program Admissions Information

Students who wish to be admitted to the Medical Assisting Program must contact a health advisor for pre-program advising. Students who wish to attend school part-time must complete non-Medical Assisting courses prior to entering the program and are expected to stay on schedule with their program of study requirements. Currently, admission is open to all interested and qualified students. Students must apply to the program by June 30th of each year. Students are admitted during the Summer Quarter of each year for the following Autumn Quarter.

Listed below are additional requirements for admission to the Medical Assisting program:

- High school graduate or GED equivalency
- Placement into MATH 102 – Beginning Algebra I OR completion of DEV 031 with a grade of “C” or higher.

- Placement into ENGL 101–Beginning Composition or completion of ENGL 100 with a grade of “C” or higher.
- Placement OUT of reading requirements or completion of DEV/ESL courses
- Attend a Medical Assisting Program information session. Program applications are available ONLY at the information sessions.
- At least two-years’ documented full-time equivalent work experience in a physician’s office or hospital, OR completion of MULT 101 with a “C” or better.
- Proficiency in physician’s office computer applications or health-care computer application OR CIT 101.
- Current Heart Association Health-Care Provider CPR certification AND current Red Cross First Aid certification OR completion of MULT 103 with a “C” or better.
- BIO 121 and 122 require completion of high school biology and chemistry OR BIO 100 AND CHEM 100 within the last five years. Contact the Biological and Physical Sciences Department for the most current information at (614) 287-2522 or 5107. They are located in Nestor Hall, 4th Floor.
- Drug screening and a background check may be required.

Statement Regarding Infectious Diseases

Students in any of the Allied Health programs, including Medical Assisting, perform their clinical work on real people. Columbus State does not discriminate against students, faculty, or patients in any way, or based on color, creed, national origin, gender, disability or sexual preference. The patient populations with whom students will work come from all walks of life, and students may therefore be exposed to many types of communicable diseases. These are not limited to, but may include: Hepatitis (A, B, C or D), HIV/AIDS, Tuberculosis, Mumps, Rubella, Rubeola, etc.

ALL students are required to have appropriate immunizations after they are admitted to the program (information is given to all admitted students). Additionally, although all precautions are taken to minimize exposure and risk, there is always a slight possibility that precautions may fail or that a student may accidentally expose him/herself. All students entering the Medical Assisting program must be aware of this slight, but real, potential. Students are required to maintain personal health insurance.

Statement Regarding Pregnancy

Student disclosure of pregnancy status to program personnel is strictly voluntary. While the College does not require that a pregnant student disclose her pregnancy, the College encourages any student who is pregnant, or may become pregnant, to discuss with her advisor any potential risks and limitations.

Pregnancy does not preclude a student from remaining in a health-related program. Students disclosing a pregnancy are encouraged to have their health-care practitioner document any restrictions that may assist the college in providing reasonable accommodations when required.

Should the student’s health-care provider indicate that there are restrictions, once notified, the College is required to abide by the restrictions. If a student is placed on restrictions by her health-care provider, and these restrictions are significant enough to compromise the student’s ability to continue in a laboratory course

or clinical placement, the student may be required to withdraw from the course and re-enter the program at a later date, following delivery. If a health-care provider indicates there are no restrictions, the student may continue in her laboratory or clinical course without any changes.

Medical Assisting Certificate Program

COURSE	CR
Quarter 1	
MAT 100 Introduction to Medical Assisting	3
BIO 121 Anatomy, Physiology & Pathophysiology I.....	5
MULT 190 Radiation Protection for General Machine Operator	2
MAT 111 Clinical Procedures–Lecture	3
MAT 113 Clinical Procedures–Lab	2
TOTAL CREDIT HOURS	15
Quarter 2	
ENGL 101 Beginning Composition	3
MATH 100 Calculations and Dosages	2
BIO 122 Anatomy, Physiology & Pathophysiology II	5
MAT 121 Advanced Medical Assisting.....	5
MAT122 Advanced Office Procedures – Lect	2
MAT123 Advanced Office Procedures – Lab	1
TOTAL CREDIT HOURS	18
Quarter 3	
PSY 100 Introduction to Psychology	5
MAT236 Computer Applications in the Medical Office–Lecture.....	1
MAT237 Computer Applications in the Medical Office–Lab.....	2
MAT 230 Pharmacology	4
MAT 240 Physician’s Office Laboratory	5
TOTAL CREDIT HOURS	17
Quarter 4	
MAT 290 Practicum	3
MAT 296 Seminar	1
MAT 260 Ethical and Professional Principles of the Medical Office	2
TOTAL CREDIT HOURS	6
TOTAL CERTIFICATE CREDIT HOURS	56

Medical Assisting Associate of Technical Studies Degree

COURSE	CR
Quarter 1	
MAT 100 Introduction to Medical Assisting	3
BIO 121 Anatomy, Physiology & Pathophysiology I.....	5
MULT 190 Radiation Protection for General Machine Operator	2
MAT 111 Clinical Procedures–Lecture	3
MAT 113 Clinical Procedures–Lab	2
TOTAL CREDIT HOURS	15
Quarter 2	
ENGL 101 Beginning Composition	3
MATH 100 Calculations and Dosages	2
BIO 122 Anatomy, Physiology & Physiology II	5
MAT 121 Advanced Medical Assisting.....	5
MAT122 Advanced Office Procedures–Lecture	2
MAT123 Advanced Office Procedures–Lab	1
TOTAL CREDIT HOURS	18
Quarter 3	
PSY 100 Introduction to Psychology	5
MAT236 Computer Applications in the Medical Office–Lecture.....	1
MAT237 Computer Applications in the Medical Office–Lab.....	2
MAT230 Pharmacology	4
MAT 240 Physician’s Office Laboratory	5
TOTAL CREDIT HOURS	17

Medical Laboratory Technology Associate Degree

Quarter 4	
MAT 290	Practicum .....3
MAT 296	Seminar .....1
MAT 260	Ethical and Professional Principles of the Medical Office ...2
TOTAL CREDIT HOURS	.....6

Quarter 5	
ENGL 102	Essay and Research .....3
HUM XXX	Humanities 111, 112, 113, 151 152, or 224 .....5
BMGT 111	Management.....5
HIMT 113	Managed Care Trends .....2
BMGT 102	Managing Interpersonal Skills I.....3
TOTAL CREDIT HOURS	.....18

Quarter 6	
ENGL 200	Business Communications .....3
COMM 105/110	Speech or Group Discussion .....3
BMGT 216	Business Ethics .....3
LEGL 264	Legal Environment of Business .....4
BMGT 103	Managing Interpersonal Skills II .....3
TOTAL CREDIT HOURS	.....16

Quarter 7	
SSCI XXX	Social Science 100,101,102,104, 105 .....5
BMGT 218	Management Training for Supervisors.....5
BMGT 201	Creative Problem Solving .....3
TOTAL CREDIT HOURS	.....13
TOTAL DEGREE CREDIT HOURS	.....103

Medical laboratory technicians play an important role in the practice of modern medicine. They perform diagnostic procedures in the health care setting, such as chemical analysis of body fluids, classification of blood cells, identification of disease producing microorganisms, and the selection of compatible donor blood for transfusion. The Medical Laboratory Technology Associate Degree program is designed to prepare graduates to perform laboratory procedures in a variety of settings. Career and employment opportunities include hospitals, research and reference laboratories, public health and veterinary facilities, and environmental and quality assurance laboratories. Graduates may also pursue careers in marketing, sales, and customer service.

The first six quarters of the Medical Laboratory program provide the students with entry-level knowledge and skills in clinical chemistry, clinical microbiology, hematology, immunohematology, immunology, and phlebotomy in a classroom laboratory setting. This training is enriched during the seventh quarter of the program when students have the opportunity to apply their previously acquired knowledge and skills in an actual working environment. Affiliated hospital and private laboratories within an approximate sixty-mile radius of Columbus will be utilized for this ten-week clinical practicum.

Students who successfully complete the program are eligible to take the certification examination administered by the Board of Registry of the American Society for Clinical Pathology and become a certified MLT(ASCP). Graduates are also eligible to take the certification examination administered by the National Credentialing Agency for Laboratory Personnel and become a certified clinical laboratory technician (CLT). With additional education and/or technical experience, graduates may also advance in the field to become a technologist, research specialist, manager or educator.

The Medical Laboratory Technology program at Columbus State is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) at 8410 West Bryn Mawr Ave, Chicago, IL 60631-3415, telephone (773) 714-8880. The program has produced over 800 graduates in the past 35 years who have consistently met or exceeded the national average on credentialing examinations. The Ohio Board of Regents recognizes Columbus State’s MLT program as a “Program of Excellence.”

Distance learning options for MLT lecture and MLT laboratory components are available for students currently working in a laboratory setting upon approval by the MLT program director.

Upon completion of the Associate Degree in Medical Laboratory Technology, the graduate should be able to demonstrate entry-level competencies in the following areas of professional practice:

- Collection and processing of biological specimens for analysis.
- Performance of analytical tests and statistical calculations on body fluids, cells, and products related to all routine

areas of the clinical laboratory.

- Recognition of factors that affect procedures and results, and take appropriate action within predetermined parameters.
- Performance and monitoring quality control to evaluate analytical procedures within predetermined parameters.
- Performance of operation and preventive and corrective maintenance of routine laboratory equipment and instruments by referring to appropriate sources/reference materials for repairs.
- Relationship of laboratory findings to common disease processes.
- Utilization of the keyboard to interact with computerized instruments and laboratory information systems to keep accurate records, prepare reports, and transmit reports clearly and completely.
- Follow prescribed safety procedures in all areas of laboratory work.
- Meet requirements to take a national certifying examination for medical laboratory technicians.
- Application of basic scientific principles in learning new techniques and procedures.
- Recognition and adherence to established safety policies.
- Recognition of the responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.
- Demonstration of professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and the public.
- Recognition and action upon one's need for continuing education as a function of growth and maintenance of professional competence.

Traditional Classes and Distance Learning Choices at Columbus State

The Medical Laboratory program is proud to offer traditional and distance learning options for our students. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at our main campus and off-campus locations. The Medical Laboratory program also offers distance learning courses that provide the same high quality learning as traditional instruction, yet with the flexibility of being able to complete your course work online or through video based instruction.

Students interested in the Medical Laboratory distance learning option will need to contact the Medical Laboratory program coordinator for specific entrance requirements. The distance learning program is designed for students who are not located in Columbus, Ohio, and who are sponsored by a CLIA accredited Clinical Laboratory facility. Students complete the theory courses online and the laboratory portion of each course in their sponsoring facility. The Medical Laboratory program contact number is (614) 287-2518 or visit our home page at <http://www.csc.edu/MLT/index.htm>.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Medical Laboratory Technology:

- Required high school courses with a grade of “C” or better or Columbus State equivalent courses with a grade of “C” or better within the last five years: Biology or BIO 100, Chemistry or CHEM 100.
- Placement into ENGL 101, or ENGL 111, or completion of ENGL 100 with a grade of “C” or better.
- Placement into MATH 135, or completion of MATH 103, with a grade of “C” or better.
- Completion of CHEM 113, CHEM 111, or CHEM 171 with a “C” or better.
- Completion of MLT 100 with a grade of “C” or better.
- Demonstration of computer literacy (high school, work related, or CIT 101).
- Completed health record on file in the Health Records Office.
- Minimum GPA of 2.500 or better through most recently completed course work.
- Students **may** be required to complete drug testing, background screening, and an interview.

Medical Laboratory Technology Associate Degree

COURSE	CR
Quarter 1	
MLT 141 Hematology I (Admission to Program).....	3
MLT 142 Hematology I Lab	3
ENGL 101 Beginning Composition	3
BIO 261 Human Anatomy	5
TOTAL CREDIT HOURS	14
Quarter 2	
MLT 130 Immunology	3
MLT 131 Immunology Lab	2
BIO 262 Human Physiology	5
MLT 120 Role & Responsibility of the MLT	1
MLT 121 Role & Responsibility of the MLT Lab	1
MATH 135 Elementary Statistics	5
TOTAL CREDIT HOURS	17
Quarter 3	
MLT 260 Clinical Chemistry	3
MLT 261 Clinical Chemistry Lab	3
BIO 115 General Microbiology	5
ENGL 102 Essay & Research	3
TOTAL CREDIT HOURS	14
Quarter 4	
MLT 250 Clinical Microbiology	4
MLT 251 Clinical Microbiology Lab	4
COMM 105 Speech	3
SSCI XXX SSCI 100, 101,102,104,105	5
TOTAL CREDIT HOURS	16
Quarter 5	
MLT 220 Immunoematology	4
MLT 223 Immunoematology Lab	3
HUM XXX HUM 111, 112, 113, 151 152, or 224	5
MULT 116 Venipuncture for Health Care Providers	2
XXX Basic Studies Elective.....	2
TOTAL CREDIT HOURS	16

Quarter 6	
MLT 240	Hematology II .....2
MLT 245	Hematology II Lab .....2
MLT 242	Body Fluids .....2
MLT 243	Body Fluids Lab .....2
MLT 244	Case Studies .....2
ENGL 200	Business Communications .....3
TOTAL CREDIT HOURS .....13	
Quarter 7	
MLT 270	Clinical Practicum .....5
MLT 271	Clinical Seminar .....2
TOTAL CREDIT HOURS .....7	
TOTAL DEGREE CREDIT HOURS .....97	

Mental Health/Chemical Dependency/Mental Retardation

- Mental Health Track**
- Chemical Dependency Track**
- Mental Retardation Track**
- Substance Abuse Prevention Track**
- Prevention Specialist Certificate**
- Community Living Specialist Certificate**
- Advanced Chemical Dependency Certificate**
- Advanced Mental Health Certificate**
- Advanced Mental Retardation Certificate**

With social, economic, and moral issues constantly changing, society is faced with increasingly complex problems which require professional, caring helpers. This evolution has created a high demand for human service specialists. Human service specialists have a professionally and personally challenging role in providing services to both children and adults with a variety of problems and/or disabilities. Graduates work with persons with mental retardation and/or developmental disabilities, emotional/mental difficulties, substance abuse and chemical dependency, as well as individuals who have co-occurring disorders. Specialists also work in consultation with psychologists, educators, psychiatrists and social workers.

Innovative educational approaches including videotaping, simulated situations, role-playing, marathon group lab participation and discussion in small group seminars are used to help students develop the knowledge, therapeutic skills, and necessary attitudes to succeed in this profession. The program stresses development and exploration of both personal and professional characteristics graduates will need to be effective helpers.

The Associate Degree program enables students to specialize in one of the following educational tracks during their second year: Mental Health, Chemical Dependency/Substance Abuse Prevention or Mental Retardation. The six-quarter, three-track program includes 560 hours of hands-on experience under the direct supervision of professionals in local agencies. Practicum experiences are available in a variety of community agencies which include mental health centers, group homes, state psychiatric hospitals, schools, workshops, private hospitals, rehabilitation facilities, drug and alcohol treatment centers, homeless shelters, supported living environments, foster care facilities, youth treatment programs, and treatment programs within the criminal justice system

Graduates who complete the Associate Degree program are eligible to apply for a Certificate of Registration as a Social Work Assistant with the State of Ohio Counselor/ Social Worker and Marriage and Family Therapist Board. The Mental Health/Chemical Dependency and Mental Retardation program is accredited by the Council for Standards in Human Service Education.

The program also offers the following certificate programs:

Prevention Specialist Certificate

This 38-credit-hour certificate is open to students with an associate, bachelor's or master's degree. Completion of this certificate meets educational practicum hours requirements for substance abuse prevention professional certification in the state of Ohio.

Community Living Specialist Certificate

This is a 54 to 58-credit-hour program for students who have, in the past, struggled with their own severe mental illness. Students make use of their coping skills to work effectively with persons with severe mental illness. Students participate in two to three clinical practicum experiences on a mental health community treatment team.

Advanced Chemical Dependency Certificate

This is a 53-credit-hour program for students with an associate, bachelor's or master's degree in a related field. Completion of this certificate meets the 270 hours of acceptable chemical dependency training for CD licensure. Students have three or four supervised clinical practicum experiences including one with clients who have co-occurring disorders.

Advanced Mental Health Certificate

This 51-credit-hour program is open to students with an associate, bachelor's or master's degree. The curriculum provides courses focused on knowledge and skills necessary to work in the mental health field. Students participate in four clinical practicum experiences in a variety of human service agencies.

Advanced Mental Retardation Certificate

This 52-credit-hour program is designed for students with an associate, bachelor's or master's degree. The curriculum offers courses focused on knowledge and skills necessary to work with clients with MR/DD issues. Students participate in four clinical practicums in a variety of human service agencies.

Courses MHCR 112, MHCR 115, MHCR 135, MHCR 191, MHCR 241, MHCR 247, MHCR 258, MHCR 291, and MHCR 298 are approved by Ohio Department of Mental Retardation and Developmental Disabilities in obtaining adult service certification.

All technical courses in the chemical dependency track are accepted by Ohio Chemical Dependency Professional Board and for renewal of social work licensure.

Upon completion of the Associate Degree in Mental Health/Chemical Dependency/Mental Retardation, the graduate will be able to:

- Describe the philosophy and benefits of community support groups in the recovery process.
- Collect data and monitor progress.
- Use counseling skills.
- Plan for, lead and process groups.
- Apply conflict resolution and anger management skills.
- Formulate assessments.
- Demonstrate an awareness of and involvement in community

advocacy activities.

- Interact effectively with diverse populations.
- Make appropriate referrals.
- Demonstrate ethical behavior.
- Develop and/or implement treatment/service plans.
- Develop and/or implement strategies to meet treatment/service goals.
- Apply service coordination/case management skills.
- Apply computer literacy skills.
- Demonstrate self-assessment skills.

In addition to the general outcomes listed above a graduate in the Chemical Dependency track will be able to:

- Identify and demonstrate the 12 Core Functions of a chemical dependency counselor.
- Recognize and identify significant signs and symptoms of chemical dependency using a variety of assessment tools.
- Identify varying levels of care for chemical dependency treatment and common criteria for appropriate referral.
- Identify relapse dynamics/triggers and utilize a variety of intervention strategies.
- Recognize stages of change and implement appropriate treatment strategies.

MH/CD/MR has articulation agreements with the following four-year colleges/universities: Ohio Dominican University, Otterbein College, Capital University, Franklin University, and University of Cincinnati.

Because students and workers in the health care field may be exposed to infectious materials and communicable diseases, the program emphasizes safety and prevention.

Specific Program Admissions Information

Listed below are additional requirements for admission to the Mental Health/Chemical Dependency/Mental Retardation program.

- Submission of an official copy of high school transcript verifying graduation or GED to Records and Registration.
- Attendance at a (voluntary) MH/CD/MR Program Orientation.
- Placement out of or completion of DEV 031 and 044.
- Completion of ENGL 101 and PSY 100 with a "C" or higher.
- Completion of the following five courses with a grade of "C" or higher:
 - MHCR 111–Introduction to Mental Health
 - MHCR 112–Introduction to Mental Retardation/Developmental Disabilities
 - MHCR 114–Introduction to Chemical Dependency
 - MHCR 115–Introduction to Counseling
 - MHCR 117–Introduction to Documentation Skills
- Compliance with and completion of all additional program requirements outlined in the program's admission policy.
- Mandatory attendance at a group admissions interview with the Mental Health/Chemical Dependency/Mental Retardation admissions coordinator and clinical coordinator.

Mental Health and Mental Retardation Tracks

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
PSY 100	Introduction to Psychology .....5
MHCR 111	Introduction to Mental Health .....4
MHCR 112	Introduction to Mental Retardation .....3
MHCR 114	Introduction to Chemical Dependency .....4
TOTAL CREDIT HOURS	19

Note: MHCR Introductory courses may be taken in any order

Quarter 2	
ENGL 102	Essay & Research .....3
HUM XXX	Humanities 111,112,113,151,152 or 224 .....5
CIT 101	PC Applications I .....3
MHCR 115	Introduction to Counseling .....4
MHCR 117	Introduction to Documentation Skills .....2
TOTAL CREDIT HOURS	17

Note: MHCR Introductory courses may be taken in any order

Quarter 3	
PSY 230	Abnormal Psychology .....5
PSY 240	Human Growth & Dev. Through the Life Span .....4
MHCR 135	Intervention Strategies .....3
MHCR 191A	Fundamentals in Human Service Practice .....4
MHCR 191B	Fundamentals in Human Service Practice-Practicum .....4
MHCR 150	Pharmacology in Human Services .....2
TOTAL CREDIT HOURS	22

Quarter 4	
SSCI 101	Cultural Diversity .....5
MHCR 241*	Counseling Skills .....4
MHCR 247*	Teaching and Supporting Strategies .....4
MHCR 291*	Practicum in Teaching/Supporting Strategies .....4
TOTAL CREDIT HOURS	17

* Offered only during the day Autumn Quarter and only during the evening Winter Quarter

Quarter 5	
COMM 105	Speech .....3
ENGL 202	Writing for Health and Human Services .....3
MHCR 251*	Social Policy .....4
MHCR 253*	Therapeutic Group Work Skills .....4
MHCR 295*	Practicum in Therapeutic Group Work Skills .....4
TOTAL CREDIT HOURS	18

* Offered only during the day Winter Quarter and only during the evening Spring Quarter

Quarter 6	
BIO 111	Intro to Biology I .....5
*MHCR 258	Service Coordination/Case Management .....4
*MHCR 298	Practicum in Service Coordination/Case Mgmt. ....4
*MHCR 299	Portfolio Completion/Capstone .....1
TOTAL CREDIT HOURS	14

* Offered only during the day Spring Quarter and only during the evening Summer Quarter

TOTAL CREDIT HOURS107

Chemical Dependency Track

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
PSY 100	Introduction to Psychology .....5
MHCR 111	Introduction to Mental Health .....4
MHCR 112	Introduction to Mental Retardation .....3
MHCR 114	Introduction to Chemical Dependency .....4
TOTAL CREDIT HOURS	19

Note: Introduction courses may be taken in any order

Quarter 2	
ENGL 102	Essay & Research .....3
CIT 101	PC Applications I .....3
HUM XXX	Humanities 111,112,113,151,152 or 224 .....5
MHCR 115	Introduction to Counseling .....4
MHCR 117	Introduction to Documentation Skills .....2
Note:	MHCR introductory courses may be taken in any order
TOTAL CREDIT HOURS	17

Quarter 3	
PSY 230	Abnormal Psychology .....5
PSY 240	Human Growth & Development Through the Life Span .....4
MHCR 135	Intervention Strategies .....3
MHCR 191A	Fundamentals in Human Services Practice .....4
MHCR 191B	Fundamentals in Human Service Practice-Practicum .....4
MHCR 150	Pharmacology in Human Services .....2
TOTAL CREDIT HOURS	22

Quarter 4	
SSCI 101	Cultural Diversity .....5
MHCR 241*	Counseling Skills .....4
MHCR 245*	Chemical Dependency I .....4
MHCR 293*	Practicum in Chemical Dependency I .....4

* Offered only during the day Autumn Quarter and only during the evening Winter Quarter

TOTAL CREDIT HOURS17

Quarter 5	
COMM 105	Speech .....3
ENGL 202	Writing for Health and Human Services .....3
MHCR 251*	Social Policy .....4
MHCR 253*	Therapeutic Group Work Skills .....4
MHCR 295*	Practicum in Therapeutic Group Work Skills .....4

* Offered only during the day Winter Quarter and only during the evening Spring Quarter

TOTAL CREDIT HOURS18

Quarter 6	
BIO 111	Intro to Biology I .....5
MHCR 265*	Chemical Dependency II .....4
MHCR 296*	Field Practicum in Chemical Dependency II .....4
MHCR 299**	Portfolio Completion/Capstone .....1

* Offered only during the day Spring Quarter & only during the evening Summer Quarter

** Offered during the Spring and Summer quarters only.

TOTAL CREDIT HOURS14

TOTAL CREDIT HOURS107

Substance Abuse Prevention Track

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
PSY 100	Introduction to Psychology .....5
MHCR 111	Introduction to Mental Health .....4
MHCR 112	Introduction to Mental Retardation .....3
MHCR 114	Introduction to Chemical Dependency .....4
TOTAL CREDIT HOURS	19

Quarter 2	
ENGL 102	Essay & Research .....3
CIT 101	PC Applications I .....3
PSY 240	Human Growth and Development Through the Life Span .....4
MHCR 115	Introduction to Counseling .....4
MHCR 117	Introduction to Documentation Skills .....2
TOTAL CREDIT HOURS	16

Quarter 3	
PSY 230	Abnormal Psychology .....5
MHCR 236	Foundations in Prevention .....4
MHCR 135	Intervention Strategies .....3
MHCR 191A	Fundamentals in Human Service Practice .....4
MHCR 191B	Fundamentals in Human Service Practice/Practicum .....4
MHCR 150	Pharmacology in Human Services .....2
TOTAL CREDIT HOURS	22

Quarter 4	
SSCI 101	Cultural Diversity.....5
MHCR 241*	Counseling Skills.....4
MHCR 247*	Teaching and Supporting Strategies.....4
MHCR 291*	Practicum in Teaching and Supporting Strategies.....4
MHCR 231*	Ethics in Substance Abuse Prevention.....1
* Offered only during the day Autumn Quarter and only during the evening Winter Quarter	
TOTAL CREDIT HOURS	.....18

Quarter 5	
COMM 105	Speech.....3
ENGL 202	Writing for Health and Human Services.....3
MHCR 251*	Social Policy.....4
MHCR 253*	Therapeutic Group Work Skills.....4
MHCR 295*	Practicum in Therapeutic Group Work Skills.....4
* Offered only during the day Winter Quarter & only during the evening Spring Quarter	
TOTAL CREDIT HOURS	.....18

Quarter 6	
BIO 111 or112	Intro to Biology I or Human Biology.....5
HUM XXX	Humanities 111,112, 113, 151, 152 or 224.....5
MHCR 237*	Program Planning and Evaluation.....3
MHCR 239*	Advanced Prevention Practicum.....3
MHCR 299*	Portfolio Completion/Capstone.....1
* Offered only during the day Spring Quarter and only during the evening Summer Quarter	
TOTAL CREDIT HOURS	.....17
TOTAL CREDIT HOURS	.....110

Prevention Specialist Certificate

COURSE	CR
Quarter 1	
MHCR 114	Introduction to Chemical Dependency.....4
MHCR 117	Introduction to Documentation Skills.....2
MHCR 135	Intervention Strategies.....3
MHCR 150	Pharmacology in Human Services.....2
TOTAL CREDIT HOURS	.....11

Quarter 2	
MHCR 236	Foundations in Prevention.....4
MHCR 191B	Fundamentals in Human Service Practice/ Practicum.....4
TOTAL CREDIT HOURS	.....8

Quarter 3	
MHCR 231	Ethics in Substance Abuse Prevention.....1
MHCR 247*	Teaching and Supporting Strategies.....4
MHCR 291*	Practicum in Teaching and Supporting Strategies.....4
* Offered only during the day Autumn Quarter and only during the evening Winter Quarter	
TOTAL CREDIT HOURS	.....9

Quarter 4	
MHCR 237	Program Planning and Evaluation.....3
MHCR 151	Social Policy.....4
MHCR 239	Advanced Prevention Practicum.....3
TOTAL CREDIT HOURS	.....10
TOTAL CERTIFICATE CREDIT HOURS	.....38

The Ohio Chemical Dependency Professionals Board has established both educational and practical experience requirements. Go to OCDP.OHIO.GOV for Prevention Specialist I and II specific requirements..

Students who wish to pursue additional, and CD specific, education may take the following: MHCR 280 and MHCR 270 Special Topics in Chemical Dependency Counseling and MCH 290 Special Topics in Prevention.

Community Living Specialist Certificate

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition.....3
PSY 100	Introduction to Psychology.....5
CIT 101	PC Applications I.....3
TOTAL CREDIT HOURS	.....11

Quarter 2	
PSY 240	Human Growth & Development Through the Life Span.....4
MHCR 111	Introduction to Mental Health.....4
MHCR 112	Introduction to Mental Retardation.....3
TOTAL CREDIT HOURS	.....11

Quarter 3	
MHCR 115	Introduction to Counseling.....4
MHCR 117	Introduction to Documentation Skills.....2
MHCR 114	Introduction to Chemical Dependency.....4
MHCR 117	Introduction to Documentation Skills.....2
TOTAL CREDIT HOURS	.....10

Quarter 4	
MHCR 135	Intervention Strategies.....3
MHCR 191A	Fundamentals in Human Service Practice.....4
MHCR 191B	Fundamentals in Human Service Practice/Practicum.....4
TOTAL CREDIT HOURS	.....11

Quarter 5	
SSCI	Cultural Diversity.....5
MHCR 150	Pharmacology in Human Services.....2
MHCR 284	Special Studies/Clinical Practicum.....4
TOTAL CREDIT HOURS	.....11

Quarter 6	
MHCR 284	Special Studies/Clinical Practicum.....4
TOTAL CREDIT HOURS	.....4
TOTAL CERTIFICATE CREDIT HOURS	.....54-58

*Optional placement quarter contingent on individualized student learning plan.

Advanced Chemical Dependency Certificate

COURSE	CR
Quarter 1	
MHCR 114	Introduction to Chemical Dependency.....4
MHCR 115	Introduction to Counseling.....4
MHCR 117	Introduction to Documentation Skills.....2
TOTAL CREDIT HOURS	.....10

Quarter 2	
MHCR 135	Intervention Strategies.....3
MHCR 191A	Fundamentals in Human Service Practice.....4
MHCR 191B	Fundamentals in Human Service Practice/Practicum.....4
MHCR 150	Pharmacology in Human Services.....2
TOTAL CREDIT HOURS	.....13

Quarter 3	
MHCR 241*	Counseling Skills.....4
MHCR 245*	Chemical Dependency I.....4
MHCR 293*	Practicum in Chemical Dependency I.....4
* Offered only during the day Autumn Quarter & only during the evening Winter Quarter	
TOTAL CREDIT HOURS	.....12

Advanced Mental Retardation Certificate

COURSE	CR
Quarter 1	
MHCR 112 Introduction to Mental Retardation.....	3
MHCR 115 Introduction to Counseling.....	4
MHCR 117 Introduction to Documentation Skills.....	2
TOTAL CREDIT HOURS.....	9

Quarter 2	
MHCR 135 Intervention Strategies.....	3
MHCR 191A Fundamentals in Human Service Practice.....	4
MHCR 191B Fundamentals in Human Service Practice/Practicum.....	4
MHCR 150 Pharmacology in Human Services.....	2
TOTAL CREDIT HOURS.....	13

Quarter 3	
MHCR 241* Counseling Skills.....	4
MHCR 247* Teaching and Supporting Strategies.....	4
MHCR 291* Practicum in Teaching/Supporting Strategies.....	4
* Offered only during the day Autumn Quarter and only during the evening Winter Quarter	
TOTAL CREDIT HOURS.....	12

Quarter 4	
MHCR 253* Therapeutic Group Work Skills.....	4
MHCR 295* Practicum in Therapeutic Group Work Skills.....	4
MHCR 270* or MHCR 280 Special Topics in CD.....	2
* Offered only during the day Winter Quarter and only during the evening Spring Quarter	
TOTAL CREDIT HOURS.....	10

Quarter 5	
MHCR 258* Service Coordination/Case Management.....	4
MHCR 298* Practicum in Service Coord/Case Man.....	4
* Offered only during the day Spring Quarter and only during the evening Summer Quarter	
TOTAL CREDIT HOURS.....	8
TOTAL CERTIFICATE CREDIT HOURS.....	52
Associate, baccalaureate or master's degree in a related field is required.	

Quarter 4	
MHCR 253* Therapeutic Group Work Skills.....	4
MHCR 295* Practicum in Therapeutic Group Work Skills.....	4
MHCR 270 Special Topics in Chemical Dependency.....	2
OR	
MHCR 280 Special Topics in Chemical Dependency.....	2
* Offered only during the day Winter Quarter and only during the evening Spring Quarter	
TOTAL CREDIT HOURS.....	10

Quarter 5	
MHCR 265* Chemical Dependency II.....	4
MHCR 296* Practicum in Chemical Dependency II.....	4
* Offered only during the day Spring Quarter and only during the evening Summer Quarter	
TOTAL CREDIT HOURS.....	8
TOTAL CERTIFICATE CREDIT HOURS.....	53

Associate, baccalaureate or master's degree in a related field is required. Students who wish to pursue additional, and CD specific, education may take the following: MHCR 280 and MHCR 270 Special Topics in Chemical Dependency Counseling, MHCR 230 Supervision and Ethics in CD, and MHCR 235 Diagnosis and Treatment in CD (see course descriptions).

Advanced Mental Health Certificate

COURSE	CR
Quarter 1	
MHCR 111 Introduction to Mental Health.....	4
MHCR 115 Introduction to Counseling.....	4
MHCR 117 Introduction to Documentation Skills.....	2
TOTAL CREDIT HOURS.....	10

Quarter 2	
MHCR 135 Intervention Strategies.....	3
MHCR 191A Fundamentals in Human Service Practice.....	4
MHCR 191B Fundamentals in Human Service Practice/Practicum.....	4
MHCR 150 Pharmacology in Human Services.....	2
TOTAL CREDIT HOURS.....	13

Quarter 3	
MHCR 241* Counseling Skills.....	4
MHCR 247* Teaching and Supporting Strategies.....	4
MHCR 291* Practicum in Teaching/Supporting Strategies.....	4
* Offered only during the day Autumn Quarter & only during the evening Winter Quarter	
TOTAL CREDIT HOURS.....	12

Quarter 4	
MHCR 253* Therapeutic Group Work Skills.....	4
MHCR 295* Practicum in Therapeutic Group Work Skills.....	4
* Offered only during the day Winter Quarter and only during the evening Spring Quarter	
TOTAL CREDIT HOURS.....	8

Quarter 5	
MHCR 258* Service Coordination/Case Management.....	4
MHCR 298* Practicum in Service Coord/Case Man.....	4
* Offered only during the day Spring Quarter and only during the evening Summer Quarter	
TOTAL CREDIT HOURS.....	8
TOTAL CERTIFICATE CREDIT HOURS.....	51

Associate, baccalaureate or master's degree in a related field is required

Multi-Competency Health

Animal Assisted Therapy in Education Certificate Basic Electrocardiography Certificate Health Care Manager Certificate Histology Certificate (Accredited by NAACLS) Phlebotomy Certificate (Approved by NAACLS)

Many health care facilities have reorganized, and the job roles within these systems have adjusted to provide care and services based on patient needs. Many employment opportunities have been created for the individual who has documented competencies in a variety of health care skills. Multi-Competency Health provides the flexibility for students to gain these important skills in health care. Many of these courses require a clinical placement. Fingerprinting and drug screening may be required for this clinical placement. The student has many options from which to choose in Multi-Competency Health.

Option 1: Associate Degree

An Associate Degree (AAS or ATS) in Multi-Competency Health can be obtained by:

A) Associate of Applied Science (AAS) option: A student may earn this degree option by choosing 2 or more certificate programs, one of which must be in MULT or NURC (Nursing Certificate programs), and at least six hours of technical options for a minimum of 49 technical hours. The student also completes the required general education courses, the required basic related courses, and the technical core courses. This degree allows the student to choose the multi-skill grouping of certificates that best suits his/her interest or employer needs.

B) Associate of Technical Students (ATS) option: “Designing your own Degree” (Refer to the Graduation Requirements for the ATS in the catalog).

Upon completion of the Associate Degree requirements in Multi-Competency Health, the graduate will be able to:

- Use medical terminology correctly.
- Recognize life-threatening situations and take appropriate action.
- Demonstrate proficiency in technical skills.
- Work in a healthcare organization as a valued member of the health-care team.
- Demonstrate interpersonal communication skills.
- Demonstrate effective infection control and safety practices.

Option 2: Certificate Programs

Many certificate programs are offered through the Multi-Competency Health Technology. These are focused technical programs that result in a certificate of completion. The certificate programs range from those designed for anyone interested to those that require completion of a health care program or specific licensure. Many area health care employers are interested in students who have successfully completed one or more of these certificates.

Option 3: Enhance or Complement Primary Skills in Nursing or Allied Health

There are many courses within Multi-Competency Health that can be taken in association with the degree option, as a complement to a certificate program, or as stand-alone courses that meet a professional need or personal interest. The requirements for each course vary. Many of these

courses are open to all students and have no prerequisites. Others require completion of a health record.

Animal Assisted Therapy in Education Certificate

A student completing the Animal Assisted Therapy in Education Certificate will be able to:

- Promote understanding of the mutually nurturing relationship between people and animals and to explore services by animals to aid people with physical, cognitive, and emotional challenges.
- Complete the Delta Society's Pet Partners introductory animal handler skills course.
- Explore the techniques for the therapeutic use of companion animals and the conduct of Animal Assisted Therapist in a variety of settings.

Basic Electrocardiography (EKG) Certificate

A student completing the EKG Certificate will be able to:

- Position leads and use electrocardiographic equipment correctly.
- Obtain and prepare an electrocardiography recording for analysis by a physician.
- Recognize and correct technical errors in an electrocardiography recording.
- Recognize and call attention to life-threatening abnormalities of an electrocardiograph.
- Provide safe, professional, direct patient contact, specifically in the areas of infection control, electrical safety, privacy and environmental safety.

Health Care Manager Certificate (Online Certificate)

A student completing the Health Care Manager Certificate will be able to:

- Apply theories and principles of human resource management to real life health care situations.
- Generate action plans, implementation activities, and evaluation processes to assure continuous quality improvement in health care institutions.
- Apply strategies, processes and current trends in health care management.
- Understand risk management and the underlying legal principles inherent in the health care system.
- All of the Health Care Management certificate courses are completed on-line.

Histology Certificate

Acceptance into program is required.

A student completing the Histology Certificate will be able to:

- Receive and accession tissue specimens.
- Prepare tissue specimens for microscopic examination, including all routine procedures.
- Assist with frozen section procedures in histopathology.
- Identify tissue structures and their staining characteristics.
- Perform preventive and corrective maintenance of equipment and instruments or refer to appropriate sources for repairs.
- Recognize factors that affect procedures and results, and take appropriate action within predetermined limits when corrections are indicated.
- Perform and monitor quality control within predetermined limits.
- Apply principles of safety.
- Demonstrate professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and with the public.
- Recognize responsibilities of other laboratory and health care personnel and interact with them with respect for their jobs and patient care.

- Recognize and act upon individual needs for continuing education as a function of growth and maintenance of professional competence.
- Exercise principles of management, safety, and supervision.
- Complete eligibility requirements to sit for American Society for Clinical Pathology certification exam.

Phlebotomy Certificate

A student completing the Phlebotomy certificate will be able to:

- Communicate (verbally and nonverbally) effectively and appropriately in the workplace.
- Demonstrate knowledge of the health care delivery system and medical terminology.
- Demonstrate knowledge of infection control and safety.
- Demonstrate basic understanding of the anatomy and physiology of the main body systems, and demonstrate basic knowledge of the circulatory, urinary, and other body systems necessary to perform specimen collection tasks.
- Demonstrate understanding of the importance of specimen collection and specimen integrity in the delivery of patient care.
- Demonstrate knowledge of collection equipment, various types of additives used, special precautions necessary, and substances that can interfere in clinical analysis of blood constituents.
- Follow standard operating procedures to collect specimens.
- Demonstrate understanding of requisitioning, specimen transport and specimen processing.
- Demonstrate understanding of quality assurance and quality control in phlebotomy.
- Complete eligibility requirements to sit for American Society for Clinical Pathology certification exam.

Specific Program Admissions Information

Listed below are additional requirements that may apply for admission to the degree programs in Multi-Competency Health Technology.

- High school graduate or GED equivalency
- Recommended high school (or equivalent) courses in Algebra, (grade of “C” or better), Biology, (grade of “C” or better), and Chemistry, (grade of “C” or better).
- Completed health statement (See Health Records Office for detailed requirements.)
- Fingerprinting for background check
- Drug screening

Multi-Competency Health Associate Degree

General Education Requirements

COURSE		CR
ENGL 101	Beginning Composition	3
ENGL 102	Essay & Research	3
COMM 105	Speech	3
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224	5
SSCI XXX	Social Science 101, 102, 104, 105 or SOC 202	5
ENGL 200	Business Communications	3

Basic Studies Requirements (specific to degree track)

COURSE		CR
MATH 102	Beginning Algebra I	4
BIO 115	Microbiology.....	5
BIO 261	Human Anatomy OR	5
BIO 121	Anatomy, Physiology & Pathology I	5
BIO 262	Human Physiology OR	5
BIO 122	Anatomy, Physiology & Pathology II	5
CHEM 113	General & Biological Chemistry	5
BIO 263	Human Pathophysiology	5

These requirements may vary according to major/plan of study.

Technical Studies Core–Required

COURSE		CR
MULT 101	Medical Terminology	2
MULT 102	Cardiopulmonary Resuscitation (CPR)	5

Students must select a minimum of 6 credit hours from technical options courses.

Technical Option Courses

Any Multi-Competency course will be accepted as a Technical Options course (when not used as part of a student’s identified certificate program).

MULT 103	Responding to Emergencies	2
MULT 110	Basic Electrocardiography	6
MULT 114	Phlebotomy Practicum II	1.5
MULT 115	Phlebotomy	4.75
MULT 116	Venipuncture for Health Care Providers	2
MULT 127	Patient Care Assistant	5
MULT 128	Introduction to Patient Care Assistant	5
MULT 135	Basic PCA/MSP Training	4
MULT 136	Advanced Patient Care Assistant	2
MULT 137	Phlebotomy Training	4
MULT 138	EKG Training	2
MULT 139	Basic PCA Training	4
MULT 140	Patient Care Technician Training	3
MULT 150*	Histologic Techniques.....	3
MULT 151*	Histologic Techniques Clinical.....	2
MULT 152*	Tissue Identification.....	2
MULT 149*	Tissue Identification Clinical.....	1
MULT 154*	Chemistry of Stains I	3
MULT 155*	Chemistry of Stains Clinical I.....	2
MULT 156*	Chemistry of Stains II.....	2
MULT 157*	Chemistry of Stains Clinical II	2
MULT 171	Current Issues: HIV	1
MULT 178	Animals and Nature - Therapeutic Programs	3
MULT 179	Companion Animals and Health	2
MULT 181	Introduction to the Human-Animal Interaction	2
MULT 270	Human Resources Management for Health Services	4
MULT 272	Health Care Resources Management	4
MULT 274	TQM/UM Accreditation	4
MULT 276	Legal Aspects and Risk Management	3
MULT 290	Special Topics in Health Care.....	1-5
MULT 291	Special Topics in Health Care Facilities	1-5
SSRV 104	CHAPS Basic Core Course.....	7
SSRV 106	CHAPS Special Topics Course.....	7
SSRV 108	CHAPS Field Experience.....	7

*Must be accepted into Histology Certificate Program to take these courses.

Associate of Applied Science Degree Requirements

This degree requires two or more certificate programs, one of which must be in MULT and the other may be in MULT or NURC, and at least six hours of Technical Options courses for a minimum of 49 technical hours. The following is a suggested curriculum plan.

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
MATH 102	Beginning Algebra I.....	4
CHEM 113	General & Biological Chem.....	5
MULT 101	Medical Terminology.....	2
MULT XXX*	Technical Certificate Course	3
TOTAL CREDIT HOURS		17

Quarter 2		
ENGL 102	Essay and Research.....	3
BIO 121	Anatomy, Physiology & Path I or	
BIO 261	Human Anatomy	5
MULT XXX*	Technical Certificate Course	5
MULT XXX*	Technical Certificate Course	3
TOTAL CREDIT HOURS		16

Quarter 3		
MULT XXX*	Technical Certificate Course	3
HUM XXX	111, 112, 113, 151, 152, or 224	5
MULT 102	CPR	5
BIO 122	Anatomy, Phys. and Path. II or BIO 262 Human Physiology	5
MULT XXX	Technical Options Course	3
TOTAL CREDIT HOURS		16.5

Quarter 4		
SSCI XXX	Social Science 100, 101, 102, 104, 105	5
BIO 115	Microbiology	5
MULT XXX*	Technical Certificate Course	3
MULT XXX	Technical Options Course	3
TOTAL CREDIT HOURS		16

Quarter 5		
COMM 105	Speech	3
MULTXXX*	Technical Certificate Course	5
MULT XXX*	Technical Certificate Course	3
MULT XXX*	Technical Certificate Course	3
TOTAL CREDIT HOURS		14

Quarter 6		
MULT XXX*	Technical Certificate Course	5
MULT XXX*	Technical Certificate Course	5
MULT XXX	Technical Options Course	3
ENGL 200	Business Communications	3
TOTAL CREDIT HOURS		16
TOTAL DEGREE CREDIT HOURS		95.5

*NURC courses may fulfill this requirement

Animal Assisted Therapy in Education Certificate

COURSE	CR	
Quarter 1		
MULT 181	Introduction to Human-Animal Interaction	2
TOTAL CREDIT HOURS		2

Quarter 2		
MULT 179	Companion Animals and Health	2
TOTAL CREDIT HOURS		2

Quarter 3		
MULT 178	Animals & Nature-Therapeutic Programs	3
TOTAL CREDIT HOURS		3
TOTAL CERTIFICATE CREDITS HOURS		7

Basic Electrocardiography (EKG) Certificate

COURSE	CR	
Quarter 1		
MLT 110	Basic Electrocardiography (EKG)	6
TOTAL CREDIT HOURS		6
TOTAL CERTIFICATE CREDITS HOURS		6

Health Care Manager Certificate*

*This program is offered online.

COURSE	CR	
Quarter 1		
CIT 101	PS Applications 1	3
BMGT 218	Management Training for Supervisors	5
TOTAL CREDIT HOURS		8

Quarter 2		
MULT 270	Human Resource Management in Health Services Organizations	4
TOTAL CREDIT HOURS		4

Quarter 3		
MULT 276	Legal Aspects and Risk Management	3
TOTAL CREDIT HOURS		3

Quarter 4		
MULT 272	Health Care Resource Management	4
TOTAL CREDIT HOURS		4

Quarter 5		
MULT 274	TQM/UM/Accreditation	4
TOTAL CREDIT HOURS		4
TOTAL CERTIFICATE CREDIT HOURS		23
Healthcare Management courses may be taken in any order as they are offered by the College.		

Histology Certificate

*Some courses are offered online.

COURSE	CR	
Quarter 1		
MULT 150*	Histologic Techniques	3
MULT 151	Histologic Techniques Clinical	2
MULT 152*	Tissue Identification	2
MULT 149	Tissue Identification Clinical	1
TOTAL CREDIT HOURS		8

Quarter 2		
MULT 154*	Chemistry of Stains I	3
MULT 155	Chemistry of Stains Clinical I	2
TOTAL CREDIT HOURS		5

Quarter 3		
MULT 156*	Chemistry of Stains II	2
MULT 157	Chemistry of Stains Clinical II	2
TOTAL CREDIT HOURS		4
TOTAL CERTIFICATE CREDIT HOURS		17

*Curriculum plans are available in the Multi-Competency Health Office. This certificate is earned by taking the theory courses online while attending a clinical experience for the clinical courses. The clinical experience is performed in clinical facilities, not necessarily in Columbus, with whom the College has affiliation agreements.

Phlebotomy Certificate

COURSE	CR	
Quarter 1		
MULT 115	Phlebotomy	4.75
TOTAL CREDIT HOURS		4.75

Quarter 2		
MULT 114	Phlebotomy Practicum II	1.5
TOTAL CREDIT HOURS		1.5
TOTAL CERTIFICATE CREDIT HOURS		6.25

Nuclear Medicine Technology

Associate Degree

Nuclear medicine technology is the medical specialty that uses the physiologic properties of radioactive material to evaluate conditions of the body and to provide therapy. The skills of the nuclear medicine technologist complement those of the nuclear medicine physician and other professionals in the field. Nuclear medicine technologists perform a number of tasks in the areas of patient care, technical skills, and radiopharmaceutical administration. They apply their knowledge of radiation physics and safety regulations to limit radiation exposure, prepare and administer radiopharmaceuticals, and use radiation detection devices and other kinds of laboratory equipment that measure the quantity and distribution of radionuclides deposited in the patient. They also perform in-vivo and in-vitro diagnostic procedures, use quality control techniques as part of a quality assurance program covering all procedures and products in the laboratory, and may participate in research activities.

Technology classes begin once per year. Admission to the program is competitive with completed applications received annually. Because students and health care workers in the health care field may be exposed to infectious materials and communicable diseases, the program emphasizes safety and prevention.

Upon completion of the Associate Degree in Nuclear Medicine Technology, the graduate will be able to:

- Apply knowledge of anatomy, physiology, and positioning techniques to accurately show anatomical structures on a nuclear medicine image.
- Act as an agent through observation and communication to obtain pertinent information for the physician to aid in diagnosis and treatment management of the patient.
- Evaluate nuclear medicine images for appropriate positioning and image quality.
- Apply the principles of radiation protection for the patient, staff, and others.
- Provide patient care and comfort during procedures.
- Recognize emergency patient conditions and, if necessary, initiate lifesaving first aid and basic life-support procedures.
- Evaluate the performance of nuclear medicine equipment systems, including the safe limits of equipment operation, and report malfunctions to the proper authority.
- Exercise independent judgment and discretion in the performance of nuclear medicine imaging procedures.
- Participate in nuclear medicine quality assurance programs.

Specific Program Admissions Information

Prospective students are required to attend an advising session to learn detailed program requirements and career opportunities. These sessions are held beginning Summer Quarter and are very helpful in answering students' questions.

Applications will be available in an information packet which may be obtained by calling the Allied Health Office at (614) 287-5215 beginning summer quarter or by sending an e-mail with your name

and complete mailing address to: afrank01@csc.edu.

Listed below are additional requirements for admission to the Nuclear Medicine Technology program.

- High school graduate or GED equivalency.
- Required high school (or equivalent) courses in Biology, (grade of "C" or better) or completion of BIO 100 (grade of "C" or better) and Chemistry, (grade of "C" or better) or completion of CHEM100, (grade of "C" or better).
- Placement into ENGL 101–Beginning Composition, or completion of ENGL 100.
- Completion of PHYS 100 with a grade of "C" or better.
- Placement into MATH 148–College Algebra, or completion of MATH 104.
- Placement into "No Reading Required" or completion of DEV 040.
- Observation hours.
- Attend nuclear medicine technology advising session.

NOTE: Individuals who have been convicted of, plead guilty to, or plead nolo contendere to a crime may be ineligible to take the credentialing exams. For additional information, contact the Allied Health Office.

Nuclear Medicine Technology Associate Degree

COURSE	CR
Quarter 1	
NUC 200 Introduction to Nuclear Medicine	3
NUC 232 Radiation Safety & Protection	2
BIO 261 Human Anatomy	5
MATH 148 College Algebra	5
MULT 101 Medical Terminology	2
TOTAL CREDIT HOURS	17
Quarter 2	
NUC 149 Introduction to Clinical Nuclear Medicine	3
NUC 213 Physics & Nuclear Imaging I	3
NUC 214 Physics & Nuclear Imaging I Lab	1
NUC 234 Nuc. Med. Radiochemistry & Radiopharmacology I	3
ENGL 101 Beginning Composition	3
BIO 262 Human Physiology	5
TOTAL CREDIT HOURS	18
Quarter 3	
NUC 215 Physics & Nuclear Imaging II	3
NUC 216 Physics & Nuclear Imaging II Lab	1
NUC 235 Radiochemistry & Radiopharmacy II	4
NUC 251 Clinical Theory & Procedures I	5
NUC 260 Clinical Practicum I	3
TOTAL CREDIT HOURS	16
Quarter 4	
NUC 217 Physics & Nuclear Imaging III	3
NUC 218 Physics & Nuclear Imaging III LAB	1
NUC 252 Clinical Theory & Procedures II	5
NUC 261 Clinical Practicum II	2
BIO 263 Pathophysiology	5
TOTAL CREDIT HOURS	16
Quarter 5	
NUC 240 Seminar I	1
NUC 254 Clinical Theory III	5
NUC 262 Clinical Practicum III	3
NUC 270 Case Studies I	1
SSCI XXX Social Science 100, 101, 102, 104, 105	5
TOTAL CREDIT HOURS	15

Quarter 6	
NUC 241	Seminar II.....1
NUC 263	Clinical Practicum IV .....3
NUC 271	Case Studies II .....1
COMM 105	Speech or
COMM 110	Conference and Group Discussion .....3
ENGL 102	Essay & Research .....3
RAD 211	Sectional Anatomy .....1
TOTAL CREDIT HOURS	.....12

Quarter 7	
NUC 242	Seminar III.....1
NUC 264	Clinical Practicum V.....3
NUC 273	Projects in Nuclear Medicine.....1
ENGL 200	Business Communications .....3
HUM XXX	Humanities 111, 112, 113, 151, 152, 224 5
NUC 280	Cross Modality Directed Practice .....2
TOTAL CREDIT HOURS	..... 15
TOTAL DEGREE CREDIT HOURS	..... 108

Students should request a program plan of study from their faculty advisor.

Nursing

Nursing Associate Degree

Nursing Certificate Programs (NURC)

Practical Nursing Certificate

Nursing Associate Degree

Columbus State’s Associate Degree program in Nursing prepares graduates to provide health care services to clients of all ages located in a variety of settings in the community and home.

The program is sequential and integrates theory from biological and social sciences with reasoning and communication skills to develop a graduate who can think critically, solve problems, and communicate effectively. Opportunities are available to complete the nursing program in seven or nine quarters depending on the student’s needs. Students who go out-of-sequence in the Nursing program may join the program sequence with a subsequent class, providing space is available and petitioning requirements are met. Students entering subsequent nursing classes will meet the catalog requirements for graduation in place for that class.

Nursing classes are structured to promote student participation and learning through lecture, seminar, laboratory practice, and clinical experiences. Two program tracks are available: the traditional track and the online track. In the traditional track, lecture and seminar activities take place on campus in the classroom. In the online track, lecture and seminar content are done using an online format, but as with the traditional track, laboratory practice and clinical experiences will be hands on. These learning opportunities are designed to encourage the student to apply concepts and utilize critical thinking skills in the promotion, maintenance, and restoration of health of clients. Students learn to work collaboratively with other health team members within the health care delivery system.

Students take 54 credit hours of nursing courses and 51 credit hours in the arts and sciences. An elective of at least 2 credit hours is required. Students participate in 4-16 hours of clinical experience each week in a variety of health care settings under the direction

of a registered nurse. Two nursing outcome exams are given during the nursing program. Students must achieve a minimum percentile score on these exams in order to continue to the next nursing course or to graduate.

Students who successfully complete the Associate Degree program are qualified to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The Nursing program at Columbus State is accredited by the National League for Nursing Accrediting Commission at 61 Broadway New York, N.Y. 10006, telephone (212) 363-5555 and the North Central Association of Colleges, and is approved by the Ohio Board of Nursing.

Upon completion of the Associate Degree in Nursing, the graduate will be able to:

- Value the role of the Associate Degree nurse.
- Plan care for persons of all ages using the nursing process.
- Demonstrate safe, competent, nurturing care in the practice of nursing.
- Communicate effectively, including the use of teaching and counseling techniques, in the promotion, maintenance, and restoration of health.
- Manage nursing care for a diverse population of clients in a variety of practice settings.
- Synthesize knowledge from nursing and related disciplines using critical thinking skills.
- Analyze legal, ethical, and economic concepts that influence nursing practice.
- Account for competence and personal growth.

Program Admissions Information

Listed below are general requirements for admission to Nursing. For specific directions, see Nursing Admission requirements available in Nursing, Records and Registration, Advising Services, Admissions Office, and the nursing home page within the Columbus State Community College Web site. Academic advising is available in Advising Services to help guide new students through the admission process. A separate application is required for nursing and is available on the Internet at www.csc.edu/nursing.

It is highly recommended that those with an interest in nursing make an appointment to meet with an academic advisor in Advising Services by calling 287-2668. There are two tracks available for the Nursing program. The online track is available for those who have a bachelor’s degree in another field of study; the traditional track is available for those with or without a previous degree.

Admission into nursing requires completion of these criteria:

1. Required Documentation
An application specific to nursing must be submitted to the nursing department through the nursing homepage, www.csc.edu/nursing **after all the admission criteria have been completed.** Those applications submitted prior to meeting all criteria will be deleted. Information about application periods will be posted at that site also.

Achievement of a minimum GPA of 2.6 on a 4-point scale based on completion of courses at the school or college most recently attended (high school, vocational program,

or higher education institution). Official transcripts must be on file in the Records and Registration Office to verify GPA by the deadline dates. Students who do not have a minimum 2.6 GPA for their most recent coursework must complete at least 12 credit hours of college-level coursework at Columbus State with a minimum GPA of 2.6 for admission to the Nursing program. The minimum 2.60 GPA must be maintained through the start of classes in Nursing.

2. COMPASS Placement Tests:

Math Skills–Placement above MATH 103 (Beginning Algebra II) or completion of MATH 103. Students with transfer credit by Columbus State for MATH 103 are not required to take the Math Skills Test. Credit awarded for MATH 135 will not substitute for the MATH 103 requirement.

Writing Skills–Placement into ENGLISH 101 (Beginning Composition) or ENGLISH 111 (English Composition), or completion of ENGLISH 100 (Language Development). Students awarded transfer credit by Columbus State for ENGL 101 or ENGL 111 are not required to take the Writing Skills Test.

3. College courses completed with a grade of “C” or better.

- NURC 101 (Nurse Aide Training Program) or prior learning assessment credit (“N” credit) or copy of current Ohio practical nurse license (LPN). Requires completion of health records before registering for the course.
- NURC 102 (Patient Care Skills) or copy of current Ohio practical nurse license (LPN).
- CHEM 113 (General and Biological Chemistry)
- Complete PSY 100 or PSY 240 credit.

4. Nurse Entrance Test (NET)

Completion of NET with a reading comprehension score of 50% or above is required for admission. This score reflects a science reading ability of at least the 12th grade. Applicants are encouraged to review NET Study Guide in preparation for taking the NET. The study guide is available at the Columbus Metropolitan Library or for purchase in the bookstore.

A NET math composite score of 64% is required for students applying to Nursing program beginning November 1, 2007.

A NET reading comprehension score of 64% will be required for students applying November 1, 2008.

5. Additional Admission Information

- The Columbus State admissions application form is online at www.csc.edu. If it has been more than three years since you attended classes at Columbus State, call (614) 287-2453 or 1-800-621-6407 ext 2453 to reactivate your student file.
- Placement tests are administered in the Student Success Testing Center, Aquinas Hall, Room 002. See the following web site for specific hours and sample questions. www.csc.edu/sstc/compass.htm
- To register to take the Nurse Entrance Test (NET), contact ACT Skills Max and Testing Center at (614) 287-5750. The initial cost for taking the NET is \$25 payable at the Cashier’s

Office, Rhodes Hall. The cost to repeat the NET is \$50. On the day of the test, bring a picture ID and paid receipt to the Testing Center, Center for Workforce Development, Room 223. Retesting eligibility begins six months from the date of previous NET testing. If you attended another nursing program and NET was a requirement for that program, have the school send a copy of the results and a letter stating the dates of attendance to: Nursing Department, 550 East Spring Street, Columbus, OH 43216.

- Contact the Records and Registration Office, Room 201, Madison Hall, (614) 287-2658, for information about the processing of college transfer credit from other institutions
- Applicants currently licensed as Practical Nurses should refer to “Licensed Practical Nurse Admission Procedure to Nursing,” available from Nursing Department or online at www.csc.edu/nursing.
- Applicants for admission from another program preparing students to take NCLEX-RN should refer to Procedure for Admission to Nursing Program from another R.N. Program” for transfer information. This information is available from Nursing Department or on-line at www.csc.edu/nursing.
- The Ohio Board of Nursing Felony Policy: Section 4723.28 of the Ohio Revised Code states that the Board may deny a convicted felon a license or the privilege of sitting for the licensure examination. A student with a history of felony conviction is responsible for informing the Chairperson of Nursing and Related Services of this history.
- The Ohio Board of Nursing Licensure Application Requirement: As of June 2004, the Ohio Board of Nursing requires all applicants for licensure to identify existing psychiatric condition(s). Please check with the Board of Nursing for further clarification or questions. (614) 466-3947 or www.nursing.ohio.gov
- A new federal law, PROWORA, known as the "Personal Responsibility Act" limits licensure to U.S. citizens and other qualified applicants. The State Board of Nursing is required to keep assurance of citizenship on record with applications for licensure. School of nursing will provide graduates with the form along with the licensure applications.
- Admission to Nursing is offered for a specific quarter only. Students who decline the offer of admission or who fail to respond must re-apply if they wish to be considered for a future class and must meet the admission criteria in effect for that class.
- A minimum grade of "C" or better is required in all Nursing, science, psychology and math courses in the curriculum. Students accepted to Nursing who do not achieve a minimum grade of "C" or better in any of the following support courses must retake the course(s) prior to the start of their NURS classes or during the quarter in which the course(s) is(are) required in the curriculum plan, in order to remain a student in good standing in the program. BIO 261 (Human Anatomy); BIO 262 (Human Physiology); PSY 240 (Human Growth and Development Through the Life Span); BIO 215 (General Microbiology); BIO 263 (Human Pathophysiology); MATH 135 (Elementary Statistics).
- Columbus State Community College makes every effort to inform prospective students of the admission requirements for the Nursing program. Students are responsible for maintaining awareness of the application periods, of the admission requirements and any changes made to those requirements over time.

Any questions about admission criteria should be directed to Columbus State Counseling and Advising Services at (614) 287-2668.

- While waiting to start nursing, students should first complete admission requirements and then work on general education and basic related courses listed on the plan of study. Please continue to work with academic advisor to complete your pre-admission checklist and to plan a schedule of other courses.
- Clinical agencies have set requirements for patient safety. Students accepted to the program will be informed of the specific requirements for health, fingerprinting, drug screening and CPR which must be met prior to starting and while continuing the NURS sequence of courses.

Application Process

The applications for the online program track will be available each November 1 through December 30 to fill the following autumn class (one class start per year). The traditional program track admits two classes per year, autumn and spring. Applications are available January 14 through January 31 to fill the following autumn and spring classes. All applications can be found online at www.csc.edu/nursing.

Nursing Associate Degree

COURSE	CR
Quarter 1	
NURS 110* Introduction to Nursing	3
NURS 100* Health Assessment in Nursing	3
ENGL 101 Beginning Composition	3
BIO 261* Human Anatomy	5
TOTAL CREDIT HOURS	14

Quarter 2	
NURS 111* Health Promotion of Women and Families	6
NURS 123* Nursing Skills I	2
NURS 132* Nursing Concepts of Pharmacology I	2
BIO 262* Human Physiology	5
PSY 240* Human Growth and Development Through the Life Span	4
TOTAL CREDIT HOURS	19

Quarter 3	
NURS 112* Introduction to Nursing Concepts of Health Maintenance and Restoration	6
NURS 124* Nursing Skills II	2
NURS 133* Nursing Concepts of Pharmacology II	2
BIO 263* Human Pathophysiology	5
TOTAL CREDIT HOURS	15

Quarter 4	
NURS 210* Nursing Concepts of Health Maintenance and Restoration I	6
ENGL 102 Essay and Research	3
BIO 215* General Microbiology	5
NURS XXX* Nursing elective 188,189, 190, 191, 192, 193 194, 197, 198, or 199	2-3
TOTAL CREDIT HOURS	16-17

Quarter 5	
NURS 211* Nursing Concept of Health Maintenance and Restoration II	6
ENGL 200 or Business Communication or	
ENGL 202 Writing for Health and Human Services	3
SSCI XXX Social Sciences 100, 101, 102, 104, 105	5
TOTAL CREDIT HOURS	14

Quarter 6	
NURS 212* Nursing Concepts of Health Maintenance and Restoration III	6
MATH 135* Elementary Statistics	5
COMM 105 or Speech or	
COMM 110 Conference and Group Discussion	3
TOTAL CREDIT HOURS	14

Quarter 7	
NURS 213 Concepts of Nursing Management	8
HUM XXX Humanities 111,112, 113, 151, 152, or 224	5
TOTAL CREDIT HOURS	13
TOTAL CREDIT HOURS	105

* A grade of "C" or better is required in order to continue in the nursing sequence.

Vocational Education Transfer Option with Ohio State University College of Education

The Nursing program at Columbus State has completed an articulation agreement with the Technical Education and Training Program of the Ohio State University College of Education. This agreement allows nursing students to complete their associate degree at Columbus State, transfer their credits to Ohio State, and complete a baccalaureate degree in Technical Education and Training. Students completing the Ohio State program may be eligible for certification by the Ohio Department of Education to teach in related high school career and technical education programs throughout the State of Ohio. Interested students should contact their Columbus State department chairperson for curriculum requirements and additional details. Please note that course requirements for this transfer option may differ from the standard plan of study published in the catalog.

Nursing Certificate Programs (NURC)

Several certificate programs are offered through the Nursing Department. These are focused programs that result in a certificate of completion. The programs range from those designed for anyone interested in patient care to those for the licensed nurse interested in a specific area of training. Many area health care employers are interested in students who have successfully completed these programs.

Nurse Aide Training Program Certificate

A student completing the Nurse Aide Certificate will be able to:

- Effectively communicate in the health care setting.
- State and demonstrate principles of medical asepsis and standard precautions.
- Identify and demonstrate the principles of safe resident care.
- Discuss and demonstrate correct basic nursing skills.
- Meet the requirements set forth in the Omnibus Budget Reconciliation Act of 1987.
- Meet the eligibility requirements needed to apply to take the state test for nurse aides.

Patient Care Skills Certificate

A student completing the Patient Care Skills Certificate will be able to:

- Effectively communicate in the health care setting.
- State and demonstrate principles of medical asepsis and standard precautions.
- State and demonstrate the principles of surgical asepsis.

- Identify and demonstrate the principles of safe resident care in an acute care setting.
- Discuss and demonstrate correct basic nursing skills commonly performed in the acute care setting.

Pranic Healing Certificate

A student completing the Pranic Healing Level I Certificate will be able to:

- Identify basic concepts and principles of Pranic Healing.
- Demonstrate basic Pranic Healing Techniques on 3 or more ailments.
- Identify the 11 major energy centers and their corresponding internal organs.
- Describe important things to avoid when healing.
- Demonstrate Self-Decontamination Techniques and Self Recharging Techniques.
- Practice self-healing and distant healing

Complementary Care Certificate

A student completing the Complementary Care Certificate will be able to:

- Define terms associated with complementary care practices.
- Identify the different types of complementary care practices.
- Discuss the use of complementary care methods for health maintenance.
- Discuss the role of research in the evaluation of complementary care.

Registered Nurse First Assistant Certificate

A student completing the Registered Nurse First Assistant Certificate will be able to:

- Act effectively and safely as a first assistant in surgery.
- Meet eligibility requirements to take the RNFA certificate examination.

Train the Trainer Certificate

A student completing the Train the Trainer Certificate will be able to:

- Teach, coordinate, and supervise a Nurse Aide Training Program.
- Meet the requirements established by the Ohio Department of Health.

Nurse Aide Certificate

COURSE	CR
Quarter 1	
NURC 101 Nurse Aide Training Program	5
TOTAL CERTIFICATE CREDIT HOURS	5

Patient Care Skills Certificate

COURSE	CR
NURC 102 Patient Care Skills.....	4
TOTAL CERTIFICATE CREDIT HOURS	4

Pranic Healing Certificate

NURC 179 Pranic Healing Level I	2
TOTAL CERTIFICATE CREDIT HOURS	2

Complementary Care Certificate

COURSE	CR
Quarter 1	
NURC 177 Holistic Healing Methods	4
TOTAL CREDIT HOURS	4

Quarter 2	
NURC 176 Fundamentals of Herbology	4
TOTAL CREDIT HOURS	4

Quarter 3	
NURC 178 Principles of Homeopathy	4
OR	
NURC 179 Pranic Healing Level I	2
OR	
PNUR 190 Introduction to Relaxation Techniques.....	1
TOTAL CREDIT HOURS	2-4
TOTAL CERTIFICATE CREDIT HOURS	9-12

Registered Nurse First Assistant Certificate

COURSE	CR
Quarter 1	
NURC 245 Registered Nurse First Assistant	5
TOTAL CREDIT HOURS	5

Quarter 2	
NURC 246 RNFA Experience in the Operating Room.....	4
TOTAL CREDIT HOURS	4
TOTAL CERTIFICATE CREDIT HOURS	9

Train the Trainer Certificate

COURSE	CR
Quarter 1	
NURC 250 NATP Train the Trainer	3
TOTAL CERTIFICATE CREDIT HOURS	3

Practical Nursing Certificate

The Practical Nursing Certificate program is a part-time evening and weekend program designed to prepare graduates to provide health care to clients of various ages in a variety of health care settings. The seven-quarter program is designed as a career path for entry-level patient care providers. Nursing assistants and patient care assistants can continue their education to become licensed practical nurses after they successfully pass the certificate program and the licensing examination. Graduates of the PN certificate program will be able to articulate into the associate degree nursing program at Columbus State Community College. The practical nursing certificate program is sequential and will assist students to develop communication, critical thinking, and problem-solving skills. Nursing courses are structured to promote student learning through lecture, laboratory, clinical, seminar, and practicum experiences. Learning opportunities are designed to apply practical

nursing concepts in the promotion, maintenance and restoration of health for clients. Students learn to work collaboratively with other health team members in the health care delivery system.

Students take 32 hours of nursing courses and 23 hours in arts and sciences for a total of 55 credits. Students will participate in clinical experiences in a variety of health care settings under the direction of a registered nurse.

Students who successfully complete the Practical Nursing Certificate program are qualified to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN). The program is approved by the Ohio Board of Nursing.

Upon completion of the Practical Nursing Certificate Program, the graduate will be able to:

- Demonstrate the role and scope of practice for the practical nurse in Ohio.
- Apply knowledge from the biological, behavioral, and nursing sciences to the care of clients.
- Utilize the nursing process to provide safe and effective nursing care to a diverse population in a variety of health care settings.
- Communicate effectively with clients and families, health care providers, and community members for the purpose of health promotion, maintenance and restoration.
- Safely perform nursing skills according to accepted standards of practice.
- Demonstrate professionalism by engaging in legal, ethical, and accountable behaviors and utilizing economic concepts as they relate to the health care arena.
- Synthesize knowledge from nursing and related disciplines using critical thinking skills.
- Demonstrate caring behaviors by respecting the diversity of each person by treating them with dignity and integrity.
- Collaborate with the health care team to provide and delegate nursing care according to Ohio Board of Nursing rules.

Program Admissions Information

Students need to apply to CSCC and adhere to admission criteria. Specific requirements for admission to the Practical Nursing Certificate Program are listed below.

- Practical Nurse Certificate Program application
- High school biology, with a grade of “C” or better, within the past five years or BIO 100 Introduction to Biological Sciences, or a college level biology
- Placement into ENGL 101–Beginning Composition
- Placement into MATH 100–Calculations and Dosages
- Completion of the following college courses with a grade of “C” or better: NURC 101–Nurse Aide Training Program or STNA and MULT 101–Medical Terminology.
- Completion of Nurse Entrance Test (NET) with a reading comprehension score of 50% or above.
- Grade point average of 2.0 or better in most recently completed course work.
- DEV 090–College Success Skills, is recommended.

Practical Nursing Certificate Program

COURSE	CR
Quarter 1	
ENGL 101* Beginning Composition	3
BIO 261* Human Anatomy	5
TOTAL CREDIT HOURS	8
Quarter 2	
BIO 262* Human Physiology	5
MATH 100** Calculations and Dosages	2
PNUR 100* Introduction to Practical Nursing	1
TOTAL CREDIT HOURS	8
Quarter 3	
PNUR 101* Foundations of Practical Nursing	2
PNUR 121* Pharmacology I	2
SSCI 101* Cultural Diversity	5
TOTAL CREDIT HOURS	9
Quarter 4	
PNUR 102* Introduction to Practical Nursing Concepts	6
PNUR 122* Pharmacology II	3
TOTAL CREDIT HOURS	9
Quarter 5	
PNUR 104* Maternal and Child Health	6
COMM 110* Conference and Group Discussion	3
TOTAL CREDIT HOURS	9
Quarter 6	
PNUR 103* Health Promotion, Maintenance, and Restoration	6
TOTAL CREDIT HOURS	6
Quarter 7	
PNUR 105* Concepts Relating to Practice	5
PNUR 190* Special Topics in Practical Nursing	1
Total Credit Hours	6
Total Certificate Credit Hours	55

*Note: A grade of “C” or better is required to continue in sequence.

** Note: A grade of “B” or better in Math 100 is required to continue in sequence.

Office Administration

Office Administration Associate Degree

Administrative Assistant Major

Administrative Assistant Medical Cognate

Administrative Assistant Legal Cognate

Office Skills Certificate

Office Specialist Certificate

The *Occupational Outlook Handbook*, printed by the United States Department of Labor, has forecast that there will be a shortage of office workers well into the new millennium. This handbook indicates that office workers will need technical skills as well as management skills in order to be successful. The Business Management/Office Administration Department offers an Associate Degree in Office Administration with an Administrative Assistant major that will enable students to have not only keyboarding skills and software knowledge but also management and team-building skills. Students also receive instruction in personalized/interpersonal skills so that they may become an integral part of any management team. These skills will enable an employee to assume responsibility without direct supervision, display initiative, exercise judgment, and prepare written/oral presentations.

The Legal Cognate prepares students to work in law offices, various courts, or the legal departments of corporations, by providing specialized knowledge of legal procedures and court structure. The Medical Cognate prepares students to work in medical settings such as hospitals, physician offices, nursing homes, clinics, dental offices, and insurance companies.

Two certificates are also available. The first is the Office Skills Certificate program, which prepares students for entry-level office positions in just three quarters. Students develop skills and knowledge in keyboarding, word processing basics, information management, and basic accounting.

The second is the Office Specialist Certificate that prepares students for the globally recognized Microsoft Office Specialist certification. In today's workplace, more employers are requiring that office employees be knowledgeable in all areas of Microsoft Office software applications. Students develop skills in keyboarding, word processing, electronic spreadsheets, database, and desktop management.

Columbus State is accredited as an associate degree granting institution offering business programs by the Association of Collegiate Business Schools and Programs (ACBSP).

Upon completion of the Associate Degree in Office Administration, the graduate will be able to:

- Maintain a filing system (alphabetic, numeric, geographic, and/or by subject).
- Write or draft responses to routine correspondence, use correct grammar, and employ punctuation rules accurately.
- Perform basic accounting tasks.
- Prepare written and oral presentations using currently accepted presentation software.
- Demonstrate knowledge of management theory, function, and

skills.

- Demonstrate a working knowledge of current legal, ethical, social, financial, and economic environmental factors as they apply to business.
- Work effectively as a member of a team.

Administrative Assistant Major

In addition to the general Office Administration competencies, a graduate in the Administrative Assistant major will be able to:

- Understand and use Excel software to create and revise spreadsheets.
- Use Windows commands to operate microcomputers effectively.
- Prepare graphics and present information.
- Research information using a variety of resources including the Internet.
- Use computers to integrate graphics into documents.
- Transcribe a variety of documents accurately and at an acceptable production rate.
- Use Microsoft Office software efficiently.

Administrative Assistant Legal Cognate

In addition to the general competencies, a graduate choosing the Legal Cognate will be able to:

- Demonstrate a basic knowledge of court structure and court proceedings at the federal, state, and local levels.
- Demonstrate knowledge of law office procedures and management.
- Demonstrate an understanding of the rules and documents involved in litigation.
- Demonstrate an understanding of criminal law OR the basics of legal research, depending on which additional class the student chooses.

Administrative Assistant Medical Cognate

In addition to the general competencies, a graduate choosing the Medical Cognate will be able to:

- Demonstrate an understanding of the structure and organization of current health care systems.
- Demonstrate the ability to spell, pronounce, and define basic medical terminology.

(Nontraditional credit may be given to any Columbus State Community College student enrolled as an Office Administration major with submission of appropriate documentation of successful completion of the Certified Professional Secretaries Exam.)

Traditional Classes and Distance Learning Choices at Columbus State

The Office Administration program is proud to offer traditional and distance learning options for our students. The traditional classroom experience continues to provide students with high quality instruction in a small classroom setting at our main campus and off-campus locations. Office Administration also offers distance learning courses that provide the same high quality learning as traditional instruction, yet with the flexibility of being able to complete course work online or through video based instruction.

Administrative Assistant Major

COURSE		CR
Quarter 1		
OADM 101	Business Grammar	4
OADM 111	Accounting Basics	4
OADM 115	Outlook	3
OADM 121	Records Management.....	3
OADM 132	Keyboarding II.....	3
TOTAL CREDIT HOURS		17

Quarter 2		
BMGT 101*	Principles of Business.....	5
BMGT 102	Managing Interpersonal Skills.....	3
OADM 102	Editing Business Documents	3
OADM 133	Keyboarding III.....	3
OADM 191	Word I	3
OADM 188	Introduction to PowerPoint.....	1
TOTAL CREDIT HOURS		18

Quarter 3		
MATH 101	Business Math.....	5
ENGL 101	Beginning Composition	3
OADM 134	Keyboarding IV.....	3
OADM 151	Computer Transcription.....	3
OADM 192	Word II	3
TOTAL CREDIT HOURS		17

Quarter 4		
BMGT 111*	Management.....	5
OADM 172	Excel	3
OADM 261	Electronic Office Procedures	4
OADM 167	Desktop Publishing.....	3
BMGT 211*	Organizational Behavior	4
TOTAL CREDIT HOURS		19

Quarter 5		
NSCI 101	Natural Science I.....	5
OADM 164	WordPerfect	3
ENGL 102	Essay & Research	3
LEGL 264	Legal Environment of Business	4
XXX XXX	Technical Elective.....	3
TOTAL CREDIT HOURS		18

Quarter 6		
BMGT 216	Business Ethics	3
ENGL 200	Business Communications	3
COMM 105	Speech or	
COMM 110	Conference & Group Discussion.....	3
XXX XXX*	Business Elective.....	3
HUM XXX	Humanities 111, 112, 113, 151,152, or 224	5
TOTAL CREDIT HOURS		17
TOTAL DEGREE CREDIT HOURS		105

*Students specializing in legal or medical cognates will substitute from the cognate lists for this course.

Technical Electives

OADM 113	Quickbooks.....	1
OADM 114	Quickbooks II.....	1
OADM 131C	Numeric Keypad.....	1
OADM 139	Keyboarding Improvement.....	3
OADM 189	Introduction to Access.....	1

Administrative Assistant Legal Cognate

The following 4 courses are required:

LEGL 102	The Legal System	2
LEGL 103	Law Office Procedures and Mgt.....	3
LEGL 201	General Practice.....	4
LEGL 205	Litigation Practice & Procedure.....	3

Choose 3 or more additional credit hours from the following courses:

LEGL 210	Criminal Law and Procedure	3
LEGL 111	Legal Research and Writing.....	4

Administrative Assistant Medical Cognate

The following 2 courses are required:

MLT 100	Introduction to Health Care	3
MULT 101	Medical Terminology.....	2

Choose 10 or more additional credit hours from the following courses:

BIO 161	Human Anatomy	5
HIMT 111	Intro to Health Information Mgmt.....	2
HIMT 113	Managed Care Trends.....	2
HIMT 121	Advanced Medical Terminology.....	3
HIMT 132*	Intro to Medical Transcription	2
HIMT 133	Legal Aspects of Health Information	3
HIMT 135	Health Data Management	3
HIMT 265	Medical Reimbursement.....	3

*Check prerequisites; signature may be required to enroll in this class.

Office Skills Certificate

COURSE		CR
Quarter 1		
OADM 101	Business Grammar	4
OADM 111	Accounting Basics	4
OADM 115	Outlook	3
OADM 121	Records Management.....	3
OADM 131	Keyboarding I	3
TOTAL CREDIT HOURS		17

Quarter 2		
OADM 102	Editing Business Documents	3
OADM 132	Keyboarding II	3
OADM 191	Word I	3
OADM XXX	Technical Elective.....	3
TOTAL CREDIT HOURS		12

Quarter 3		
OADM 133	Keyboarding III.....	3
OADM 151	Computer Transcription	3
OADM 172	Excel	3
OADM 192	Word II	3
TOTAL CREDIT HOURS		12
TOTAL CERTIFICATE CREDIT HOURS		40

Technical Electives (Choose one or more):

OADM 139	Keyboarding Improvement	3
OADM 164	WordPerfect	3
OADM 167	Desktop Publishing	3

Office Specialist Certificate

COURSE		CR
Quarter 1		
OADM 186a	Word Module 1	1
ODM 187a	Excel Module 1.....	1
OADM 188a	PowerPoint Module1	1
OADM 189a	Access Module 1	1
OADM 131	Keyboarding I.....	3
TOTAL CREDIT HOURS		7

Quarter 2		
OADM 186b	Word Module 2	1
OADM 187b	Excel Module 2.....	1
OADM 188b	PowerPoint Module 2	1
OADM 189b	Access Module 2.....	1
OADM 193	OS Practicum I.....	1
TOTAL CREDIT HOURS		5

Quarter 3		
OADM 186c	Word Module 3	1
OADM 187c	Excel Module 3.....	1
OADM 188c	PowerPoint Module 3	1
OADM 189c	Access Module 3.....	1
OADM 115	Outlook	3
TOTAL CREDIT HOURS		7

Quarter 4

OADM 186d Word Module 4.....	1
OADM 187d Excel Module 4.....	1
OADM 189d Access Module 4.....	1
OADM 194 OS Practicum II	1
OADM 195 Integration.....	1
TOTAL CREDIT HOURS	5
TOTAL CERTIFICATE HOURS.....	24

Paralegal Studies

Paralegal Studies Associate Degree Paralegal Studies Certificate (Post Baccalaureate Option)

Due to the explosive growth of legal services now being requested in all sectors of our economy, there is a continuous demand for well trained personnel in all facets of the legal assisting process. The need for paralegal assistants is so great that it is estimated that one paralegal will assist every three or four attorneys, and, in some areas of practice, such as corporate legal departments, there will be one legal assistant hired for every attorney.

The nature of the paralegal assistant’s position in the legal community requires individuals with a well-rounded educational background. Critical thinking and excellent communication skills are essential competencies of a legal assistant and are included in courses in english, mathematics, humanities, social science, and basic science.

The technical curriculum has been designed to provide students with knowledge and skills in the areas of the role of a legal assistant, ethical requirements, legal research, analysis, the preparation of legal documents, litigation practice and procedure, real estate transactions, family law, administrative law, criminal law, and probate law and practice.

The Legal Assisting Certificate (Post Baccalaureate Option) is designed for persons who currently possess a bachelor’s, master’s or Ph.D. degree, students with an associate degree and work experience in a legal environment will be considered after an interview with the department chairperson.

Paralegal assistants have traditionally been utilized in legal environments that are intensive in both client contact and document preparation.

Upon completion of the Associate Degree in Paralegal Studies, the graduate will be able to:

- Demonstrate proficiency in manual and computer assisted research of legal questions and incorporate the same into properly cited memoranda of law.
- Demonstrate an understanding of the legal and ethical responsibilities of a legal assistant.
- Demonstrate an ability to use municipal, county, state, and federal clerks of court, and other recording offices.

- Prepare deeds, notes, and other documents for residential real estate transfer.
- Draft documents required to complete family law matters.
- Draft pleadings, motions and other documents within the applicable rules of evidence and procedure to prepare and complete civil and criminal litigation.
- Prepare documents for use in corporate, partnership, and other business related matters.
- Draft wills, trusts, and other documents necessary for estate administration.
- Describe the legislative and judicial functions of administrative agencies.

NOTE: Legal assistants may not sign legal documents, appear in court, or give legal advice. All activities in legal matters must be supervised by a licensed attorney.

Paralegal Studies Associate Degree

COURSE	CR
Quarter 1	
ENGL 101 Beginning Composition	3
OADM 131 Keyboarding I OR OADM 164 WordPerfect for Windows.....	3
LEGL 101 Introduction to Paralegal Studies.....	4
LAWE 104 Government and the Law	3
LEGL 102 The Legal System	2
LEGL 103 Law Office Procedures and Management	3
TOTAL CREDIT HOURS	18

Quarter 2	
ENGL 102 Essay & Research	3
MATH 101 Business Mathematics	5
CIT 101 PC Applications I	3
LEGL 111 Legal Research & Writing I	4
LEGL 114 Family Law	3
TOTAL CREDIT HOURS	18

Quarter 3	
ENGL 200 Business Communications	3
SOC 101 Introduction to Sociology	5
LEGL 112 Legal Research & Writing II	4
LEGL 119 Real Estate Transactions	3
LEGL 226 Administrative Law	3
TOTAL CREDIT HOURS	18

Quarter 4	
COMM 105 Speech OR COMM 110 Conference & Group Discussion.....	3
HUM XXX Humanities 111, 112, 113, 151, 152 or 224	5
LEGL 205 Litigation Practices and Procedures I	3
LEGL 201 General Practice	4
LEGL 210 Criminal Law and Procedure	3
TOTAL CREDIT HOURS	18

Quarter 5	
NSCI 101 Natural Science I	5
PSY 100 Introduction to Psychology	5
LEGL 251 Computer Assisted Legal Research	3
LEGL 215 Paralegal Practicum I	2
LEGL 216 Paralegal Practicum Seminar I	1
TOTAL CREDIT HOURS	16

Quarter 6	
LEGL 224 Probate Law and Practice	3
LEGL 220 Business Organizations	3
LEGL XXX Electives	5
LEGL 227 Paralegal Practicum II	2
LEGL 228 Paralegal Practicum Seminar II	1
LEGL 243 Alternative Dispute Resolution.....	3

TOTAL CREDIT HOURS	17
TOTAL DEGREE CREDIT HOURS.....	102

Recommended Electives:

LEGL 113	Legal Research and Writing III.....	5
LEGL 230	Special Problems in Legal Assisting.....	2
LEGL 234	Litigation II.....	3
LEGL 238	Insurance Law.....	3
LEGL 240	Professional Malpractice.....	3
LEGL 232	Taxation.....	3
LEGL 244	Debtor/Creditor Relations.....	3
LEGL 250	Intellectual Property.....	4
LEGL 252	Survey of Advanced Legal Technology (CALR II).....	2
LEGL 281	Social Security Prac & Proc.....	4
LAW 220	Constitutional Law.....	3
LAW 215	Intro to Cyberlaw.....	3
LEGL 222	Immigration Law.....	3
ACCT 106	Introduction to Accounting I.....	5
ACCT 107	Introduction to Accounting II.....	5

* LEGL 261, 262, 263, 264, and 265 are not electives for Paralegal Studies. Credit toward graduation will not be given.

Paralegal Studies Certificate (Post Baccalaureate Option)

COURSE		CR
Quarter 1		
LEGL 101	Intro. to Paralegal Studies.....	4
LEGL 102	Legal Systems.....	2
LEGL 103	Law Office Procedures.....	3
LEGL 111	Legal Research and Writing I.....	4
TOTAL CREDIT HOURS		13
Quarter 2		
LEGL 114	Family Law.....	3
LEGL 205	Litigation Practice and Procedure.....	3
LEGL 112	Legal Research and Writing II.....	4
LEGL 251	Computer Assisted Legal Research.....	3
TOTAL CREDIT HOURS		13
Quarter 3		
LEGL 119	Real Estate Transactions.....	3
LEGL 226	Administrative Law.....	3
LEGL 224	Probate Law and Practice.....	3
LEGL 210	Criminal Law and Procedures.....	3
TOTAL CREDIT HOURS		12
Quarter 4		
LEGL 220	Business Organizations.....	3
LEGL 201	General Practice.....	4
LEGL 215	Paralegal Practicum I.....	2
LEGL 216	Paralegal. Practicum Seminar I.....	1
TOTAL CREDIT HOURS		10
TOTAL DEGREE CREDIT HOURS		48

Quality Assurance Technology Associate Degree

Individuals who have high standards, are logical, observant, good at problem solving, and have an investigative mind, are a great fit for a career as a Quality Assurance Technician. Quality Assurance Technicians are responsible for monitoring, testing, and continuously improving the quality of products and services for today’s businesses.

Coursework in Columbus State’s Quality Assurance program will include an introduction to manufacturing, statistical process control, value engineering, and technical writing. Participants will study and practice the major elements and concepts of total quality management, including principles and styles of systems thinking, continuous improvement, management by data, and historic influences of leaders in quality management. Students will learn statistical methods to determine reliability, the effectiveness of data analysis, the use of simulations, and ways to improve system performance.

Graduates will find a wide range of opportunities in fields as diverse as manufacturing, banking, insurance, or food processing. A valuable member of the business team, grads will apply the tools of their chosen field in a problem-solving process to achieve significant gains for the company—such as product improvement, reducing scrap, shortening cycle time, and improving profitability. Quality Assurance Technicians have the satisfaction of working in an area that is essential, not only to profitability, but to survival of the business.

Quick Notes on QA:

- QA technician salaries for job postings in Columbus are 7 percent higher than the national average. (*Source: Indeed.com*)
- Students work on quality improvement projects for local organizations as part of their course work.
- The quality movement started in manufacturing, but is now applied to service, healthcare, education and government sectors.
- A career in QA may combine technical knowledge, change management, people skills, and teaching.

The Quality Assurance Technology also shares related courses with the Electronic Engineering Technology and the Mechanical Engineering Technology. For additional information, refer to Electronic Engineering Technology and Mechanical Engineering Technology which are listed in this section of the Catalog.

Quality Assurance Technology Associate Degree

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition.....	3
MATH 111	Technical Math I.....	4
EET 111	DC Fundamentals.....	4
EET 112	DC Lab.....	2
MECH 112	Computer Applications in Manufacturing.....	3
ENGT 100	Introduction to Engineering Technology.....	3
TOTAL CREDIT HOURS		19

Radiography Associate Degree

Radiographers are highly skilled professionals qualified by education to perform imaging examinations and accompanying responsibilities at the request of a physician. A radiographer is able to perform diagnostic imaging, fluoroscopy, trauma, surgical, and portable radiography. Specialized areas in the curriculum include computed tomography, vascular and digital imaging, and magnetic resonance imaging.

Technology classes begin in Summer Quarter. Admission to the program is competitive with completed applications received annually. Because students and health care workers in the field may be exposed to infectious materials and communicable diseases, the program emphasizes safety and prevention.

Program Mission and Goals

The mission of the Columbus State Community College Radiography program is to provide a quality educational program that meets the lifelong learning needs of its community. This is achieved by preparing graduates for entry-level employment as a radiography science professionals. This is consistent with the Columbus State Community College Mission Statement.

The program holds as its primary objectives the education and training of qualified applicants to become competent radiographers. The program endeavors to instill in students, and subsequently graduates, the following program goals:

1. To develop graduates who will recognize the need for lifelong learning in their chosen profession.
2. To graduate students with the ability to behave in a compassionate, ethical, and professional manner.
3. To graduate students who will successfully complete all program requirements, meet entry-level expectations of employers, and successfully complete the ARRT national certification exam.
4. To develop applied skills in effective communication, critical thinking, and problem solving in the practice of the radiography profession.

Specific Program Admissions Information

Prospective students are required to attend a mandatory information session to learn detailed program requirements and career opportunities. These sessions are held several times each quarter and are very helpful in answering students' questions. Information session dates are available by calling (614) 287-5215 or on the Web at: www.csc.edu/AH/.

The yearly deadline for application to the Radiography program is April 1, for admission beginning the following summer. Applications are available only by attending one of the mandatory information sessions.

Listed below are additional requirements for admission to the Radiography program.

- High school graduate, GED or equivalent.
- Required high school (or equivalent) courses in Biology, (grade of "C" or better), Chemistry, (grade of "C" or better) and Physics, (grade of "C" or better).

Quarter 2		
ENGL 102	Essay and Research	3
MATH 112	Technical Math II	4
PHYS 181	Technical Physics (Mechanics)	4
QUAL 240	Total Quality Management	3
MECH 244	Statistical Process Control	3
TOTAL CREDIT HOURS		17

Quarter 3		
MATH 135	Elementary Statistics	5
MECH 120	Mechanical Drafting I	3
EET 120	AC Fundamentals	4
EET 121	AC Lab	2
MECH 250	Materials Science	3
TOTAL CREDIT HOURS		17

Quarter 4		
COMM 105	Speech	3
PHYS 185	Technical Physics (heat, light & sound)	4
MECH 111	Manufacturing Processes	4
QUAL 150	Quality Transformation	4
EET 132	Digital Fundamentals	3
TOTAL CREDIT HOURS		18

Quarter 5		
ENGL 204	Technical Writing	3
HUM XXX	Humanities 111,112,113,151 152, or 224	5
QUAL 251	Value Engineering	3
EET 130	Electronic Devices	4
EET 131	Devices Lab	2
TOTAL CREDIT HOURS		17

Quarter 6		
SSCI XXX	Social Science 100,101, 102, 104, or 105	5
MECH 240	Machine Tools	4
QUAL 260	Reliability and System Maintainability	3
BMGT 257	Project Management	3
QUAL 250	Metrology	3
TOTAL CREDIT HOURS		18
TOTAL DEGREE CREDIT HOURS		106

- Placement into ENGL 101–Beginning Composition.
- Placement into MATH 135/148–College Algebra/Elementary Statistics.
- Placement into “No Reading Required.”
- Written statement relevant to interest and intent in Radiography.
- Health care experience or observation hours.
- Attend radiography mandatory information session.

Note: Individuals who have been convicted of, plead guilty to, or plead nolo contendere to a crime may not be eligible to take the American Registry of Radiologic Technologists (ARRT) Radiography Examination according to the ARRT’s code of Ethics, Section B.3. Rules of Ethics. For additional information, contact the ARRT. (www.arrt.org)

Limited Radiography Certificate

This Certificate Program meets the requirements of the Ohio Revised Code (3701-72-01 - 3701-72-04 for a General X-ray Machine Operator. It is designed to meet the learning needs of adults wishing to enter the imaging field of radiography with a limited license. The RAD 190 course and the modularized RAD 141 and RAD 142 courses are apart of the program’s technical requirements.

At the completion of the program, the learner will be able to:

1. Demonstrate competence in academic technical courses that meet the ODH requirements,
2. Be eligible to apply for the ODH General X-Ray Machine Operator, (GxMO) State Examination,
3. Demonstrate competence in patient care skills and radiographic positioning and imaging skills specific to a GxMO,
4. Incorporate general education outcomes for effective communications necessary in a health care setting,
5. Incorporate basic related course content to support technical course academic theory and practice,
6. Develop technical skills required for employment in outpatient imaging facilities, urgent care centers, and physician practices.
7. Develop additional clinical skills needed for employment in sub-specialty areas in imaging. Examples include podiatry, chiropractic, general practitioner, outpatient imaging facilities, etc.
8. Provide a career ladder from the certificate program to the associate degree program at Columbus State.

Radiography Associate Degree

COURSE	CR
Quarter 1	
RAD 111 Introduction to Radiologic Technology	3
RAD 141 Radiographic Procedures I	4
BIO 121 Anatomy, Physiology and Pathology I	5
MATH 148 College Algebra or	
MATH 135 Elementary Statistics	5
MULT 101 Medical Terminology	2
TOTAL CREDIT HOURS	19
Quarter 2	
RAD 142 Radiographic Procedures II	4
RAD 261 Clinical I	2
BIO 122 Anatomy, Physiology and Pathology II	5
CIT 101 PC Applications I	3
TOTAL CREDIT HOURS	14
Quarter 3	
RAD 113 Radiologic Science	5
RAD 143 Radiographic Procedures III	4

RAD 262 Clinical II	2
ENGL 101 Beginning Composition	3
TOTAL CREDIT HOURS	14

Quarter 4

RAD 118 Radiographic Exposure and Processing	5
RAD 148 Special Radiologic Procedures	4
RAD 263 Clinical III	2
XXX XXX Technical Elective	3
ENGL 102 Essay & Research	3
TOTAL CREDIT HOURS	17

Quarter 5

RAD 254 Seminar I	1
RAD 264 Clinical IV	3
MULT 103 Responding to Emergencies	2
SSCI XXX Social Science 100, 101, 102, 104, 105	5
HUM XXX Humanities 111, 112, 113, 151, 152, 224	5
TOTAL CREDIT HOURS	16

Quarter 6

RAD 126 Radiation Biology and Processing	3
RAD 212 Sectional Anatomy	3
RAD 222 Computerized Imaging	1
RAD 255 Seminar II	1
RAD 265 Clinical V	3
ENGL 200 Business Communications	3
TOTAL CREDIT HOURS	14

Quarter 7

RAD 123 Advanced Exposure and Processing	4
RAD 231 Radiographic Pathology	3
RAD 256 Seminar III	1
RAD 266 Clinical VI	3
COMM 105 Speech or	
COMM 110 Conference & Group Discussion	3
TOTAL CREDIT HOURS	14
TOTAL DEGREE CREDIT HOURS	108

Students should request a program plan of study from their faculty advisor.

Technical Electives

RAD 100 Health & Safety Guidelines for Allied Health Students	1
RAD 267 Clinical VII–elective	3
NURC 101 Nurse Aid Training	5
HIMT 121 Advanced Medical Terminology	3
RAD 190 Radiation Protection for General Machine Operators	2
RAD 141A Intro to Radiography Equipment and Patient Care	0.5
RAD 142A Radiographic Positioning of the Chest /Abdomen	1
RAD 141B Radiographic Positioning of the Upper Extremities	1
RAD 141C Radiographic Positioning of the Lower Extremities	1
RAD 142B Radiographic Positioning of the Spine/Skull	0.5
RAD 141D Radiographic Positioning for Podiatry	0.5
HUM XXX Humanities 111, 112, 113, 151, 152, 224	5
TOTAL CREDIT HOURS	16

Limited Radiography Certificate Courses in the Certificate

General Education Courses

ENGL 101 Beginning Composition	3
ENGL 102 Essay and Research	3

Basic Related Courses

MATH 100 Dosages and Calculations	2
BIO 101 Intro to Anatomy and Physiology	3
MULT 101 Medical Terminology	2
CIT 101 PC Applications I	3

Technical Courses

RAD 190 Radiation Protection for General Machine Operators	2
RAD 141A Intro to Radiography Equipment and Patient Care	0.5
RAD 142A Radiographic Positioning of the Chest /Abdomen	1
RAD 141B Radiographic Positioning of the Upper Extremities	1
RAD 141C Radiographic Positioning of the Lower Extremities	1
RAD 142B Radiographic Positioning of the Spine/Skull	0.5
RAD 141D Radiographic Positioning for Podiatry	0.5

Real Estate Associate Degree

The associate degree program in Real Estate offers the course work that meets the standards of professionalism in the real estate industry. The program follows a blueprint for real estate education developed by the Ohio Association of Realtors. Courses meet the educational requirements for real estate licensure in the State of Ohio.

The program meets the career objective of persons interested in real estate sales or other allied real estate professions. For licensed real estate brokers and sales associates, it provides training to upgrade their professional competence and to meet future educational requirements of the profession. For students who plan to continue their education beyond the associate degree, it offers credit courses that transfer to some four-year colleges and universities.

Prospective real estate students who plan to take the real estate licensing exam are more successful when they take courses as shown in the plan of study.

Upon completion of the Associate Degree in Real Estate, the graduate will be able to:

- Demonstrate understanding of key principles and concepts involved in a real estate transaction.
- Prepare and present correctly all forms necessary to complete a real estate transaction.
- Create effective promotional plans to market property.
- Identify and explain different types of construction materials.
- Apply one of three appraisal techniques to the evaluation of a residential or commercial property.
- Manage a real estate property sales force effectively.
- Apply relevant formulas and microcomputer applications to the practice of real estate.
- Effectively apply current technology to daily real estate activity.

Continuing Education

Only courses approved by the Ohio Division of Real Estate qualify for continuing education credit for licensed professionals. Please check with the Ohio Division of Real Estate & Professional Licensing for course approval before enrolling. Courses required for licensing do not qualify for continuing education credit. Before students schedule classes, they should contact their advisor if they are interested in taking (1) only the sequence of courses to prepare for specific real estate licensing exams, (2) only selected courses to meet continuing education requirements of the Ohio Division of Real Estate & Professional Licensing.

Real Estate Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
PSY 100	Introduction to Psychology .....5
CIT 101	PC Applications 1 .....3
REAL 101	Real Estate Principles & Practices .....4
REAL 102	Real Estate Law .....4
TOTAL CREDIT HOURS	.....19

Quarter 2	
ENGL 102	Essay & Research .....3
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224 .....5
MATH 101	Business Mathematics .....5
REAL 111	Real Estate Finance .....2
REAL 112	Real Estate Appraisal .....2
TOTAL CREDIT HOURS	.....17

Quarter 3	
ENGL 200	Business Communications .....3
LEGL 264	Legal Environment of Business .....4
ACCT 106	Intro to Accounting I .....5
MKTG 122	Business and the Internet .....3
REAL 121	Residential Sales Practices .....3
TOTAL CREDIT HOURS	.....18

Quarter 4	
COMM 105	Speech .....3
CMGT 253	Residential Construction .....3
ENVR 158	Environmental Site Assessment .....3
FMGT201	Business Finance .....5
REAL 240	Introduction to Entrepreneurship .....3
TOTAL CREDIT HOURS	.....17

Quarter 5	
ECON 200	Principles of Microeconomics .....5
BMGT 111	Management .....5
REAL 270	Real Estate Investing .....3
GIS100	Acquiring GIS Data .....3
TOTAL CREDIT HOURS	.....16

Quarter 6	
NSCI 101	Natural Science I .....5
HRM 121	Human Resources Management .....4
REAL 221	Professional Property Management .....3
REAL 275	Repair, Restore, Remodel .....3
TOTAL CREDIT HOURS	.....15
TOTAL DEGREE CREDIT HOURS	.....102

Real Estate Pre-licensure Certificate

REAL 101	Real Estate Principles & Practices .....4
REAL 102	Real Estate Law .....4
REAL 111	Real Estate Finance .....2
REAL 112	Real Estate Appraisal .....2

Respiratory Care

Registered Respiratory Therapist Program

Graduates are eligible to sit for the Certification Examination for Entry-Level Respiratory Therapists and the Registry Examination for Advanced Respiratory Therapy Practitioners offered by the National Board for Respiratory Care, Inc. Graduates are also eligible to apply to become licensed as Respiratory Care Professionals by the Ohio Respiratory Care Board.

Respiratory therapists are life support specialists concerned with managing, controlling, and treating problems related to the cardio-pulmonary system. Respiratory care practitioners work with the physician, nurse, and other health care personnel.

The complexity of the respiratory care worker's responsibility requires extensive training, dedication, and professionalism. Respiratory care takes place in such settings as the newborn nursery, surgical and medical units, emergency departments, outpatient departments, and intensive care units of hospitals.

In addition to classroom learning, students enrolled in the Respiratory Care program gain hands-on experience while working in area health care facilities, under the supervision of qualified instructors. These clinical experiences teach students to apply their knowledge and skills in actual work environments. Because students and workers in the health care field may be exposed to infectious materials and communicable diseases, the program emphasizes safety and prevention.

Columbus State's program is accredited by the Committee on Accreditation for Respiratory Care.

Upon completion of the Associate Degree in Respiratory Care, the graduate will be able to:

- Review existing data in patient medical record and recommend diagnostic procedures based on available patient information.
 - Collect and evaluate pertinent clinical information.
 - Perform diagnostic procedures and interpret results.
 - Determine appropriateness of prescribed respiratory care plan, recommend modifications where indicated, and participate in the development of respiratory care plan.
 - Select and obtain equipment, and assure cleanliness of equipment appropriate to the respiratory care plan.
 - Assemble, check for proper function, identify malfunctions of equipment, and take action to correct malfunctions of equipment.
 - Explain planned therapy and goals to patient, maintain records and communication, and protect against patient nosocomial infections.
 - Conduct therapeutic procedures to achieve maintenance of a patient airway, including the care of artificial airways, to achieve the removal of secretions.
 - Conduct therapeutic procedures to achieve adequate spontaneous and artificial ventilation.
 - Conduct therapeutic procedures to achieve adequate arterial and tissue oxygenation.
- Evaluate and monitor the patient's response to respiratory care.
 - Make necessary modifications in therapeutic procedures, and recommend respiratory care plan modifications based on patient response.
 - Initiate and conduct, or modify respiratory care techniques in an emergency setting.
 - Demonstrate personal and professional behaviors required for successful employment.
 - Apply the principles of continuous quality improvement and quality assurance to work situations.

Specific Program Admissions Information

Advanced standing credit may be awarded for previous health care training and/or experience. Please contact Sue Donohue at (614) 287-2633 or sdonohue@csc.edu. For additional information, please see the program Web site.

Listed below are additional requirements for admission to the Respiratory Care program.

- High school graduate or GED equivalency
- Official transcripts of all previously attended colleges/universities
- Placement into MATH 135–Elementary Statistics
- Placement into ENGL 101–Beginning Composition
- Placement into “No Reading Required”
- High school biology with a "C" or above
- High school chemistry with a “C” or above
- CHEM 113 with a "C" or above
- MULT 120 with a "C"
- Completion of the Nurse Entrance Test (NET)
- RESP102 with a "C" or above
- Completed health statement
- Minimum GPA of 2.50 or above
- Drug Testing and Background Screening must be completed (Students will receive this information upon acceptance into the program.)

Statement Regarding Infectious Diseases:

Students in this program perform their clinical work on patients in health care facilities and may therefore be exposed to many types of communicable diseases and infectious materials. These are not limited to but may include Hepatitis (A, B, C or D), HIV/AIDS, TB, measles, German measles, and mumps.

All students are required to have appropriate immunizations after they are admitted to the program (information is given to all admitted students). Additionally, although all precautions are taken to minimize exposure and risk, there is always a slight possibility that precautions may fail or that a student may have an accidental exposure. All students entering the program must be aware of this slight, but real, potential. All students are encouraged to have personal health insurance in effect by the first day of class.

Respiratory Care Associate Degree

COURSE	CR
Quarter 1	
BIO 261 Human Anatomy	5
MATH 135 Elementary Statistics	5
HIMT 113 Managed Care Trends	2
RESP 100 Introduction to Respiratory Care	5
RESP 160 Introduction to Respiratory Care Equipment.....	1
TOTAL CREDIT HOURS	18
Quarter 2	
ENGL 101 Beginning Composition	3
BIO 115 General Microbiology	5
BIO 262 Human Physiology	5
RESP 114 Introduction to Pulmonary Disease	4
RESP 150 Introduction to Pharmacology	2
RESP 170 Mechanical Ventilation	1
TOTAL CREDIT HOURS	20
Quarter 3	
HUM XXX Humanities 111,112,113,151, 152 or 224	5
RESP 130 Patient Assessment	2
RESP 152 Case Management I	2
RESP 196 Clinical Practice I	8
TOTAL CREDIT HOURS	17
Quarter 4	
ENGL 102 Essay & Research	3
RESP 132 Patient Assessment II	2
RESP 154 Case Management II	2
RESP 198 Clinical Practice II	8
TOTAL CREDIT HOURS	15
Quarter 5	
COMM 105 Speech	3
RESP 230 Patient Assessment III	2
RESP 256 Case Management III	2
RESP 290 Clinical Practices III	8
TOTAL CREDIT HOURS	15
Quarter 6	
ENGL 200 Business Communications	3
SSCI XXX Social Science 100, 101, 102, 104, or 105.....	5
RESP 270 Current Issues in Respiratory Care	2
RESP 292 Clinical Practices IV	8
RESP XXX Technical Elective	3
TOTAL CREDIT HOURS	21
Quarter 7	
RESP 295 Clinical Experience.....	4
TOTAL CREDIT HOURS	4
TOTAL DEGREE CREDIT HOURS	110
Technical Electives	
RESP 232 Pediatric Respiratory Care	3
RESP 238 Pulmonary Functions	3
RESP 251 Respiratory Care Home Care Techniques	3
RESP 280 Respiratory Care Seminar	2
RESP 221 Introduction to Sleep Problems	2
RESP 223 Level I Polysomnography Technician	2
RESP 224 Level I Polysomnography Technician-Clinical	2
RESP 225 Level II Polysomnography Technician	2
RESP 226 Level II Polysomnography Technician-Clinical	2
RESP 227 Polysomnography Current Topics	2

Sport and Exercise Studies Associate Degree

Sport Management Major Physical and Recreation Instruction Major Exercise Science Major Exercise Specialist Certificate

The Sport and Exercise Studies program prepares students to work in sport, recreation, health and/or fitness centers. From private clubs to public facilities, trained managers, instructors, and programmers are needed to develop, train, staff, and implement programming to address the wellness needs of the general public or specific clients/populations, in compliance with local, state, and federal guidelines. Exercise science, strength and resistance training, risk management, human nutrition, anatomy, physiology, sport business/marketing, and health and physical education courses blended with the College's general education course work will develop the skills necessary to gain a managerial or technical position within the sport and fitness field.

Upon completion of the associate degree in a Sport and Exercise Studies program, the graduate will be able to:

- Communicate current information on exercise, nutrition, and health promotion to supervisors, peers, and the public.
- Demonstrate good judgment and professional behavior by applying professional exercise and sport management organizations' codes of ethics.
- Demonstrate skill in planning and administering effective recreational, fitness, wellness, and sport activities in the community.
- Assess readiness for exercise and existing fitness levels in the apparently healthy individual by measuring and evaluating physiological responses and adaptations.
- Design sport and exercise programs for individuals and/or groups by analyzing appropriate physiological assessment data.
- Assess the potential for behavioral change in each client, creating maximal opportunity for success.
- Model lifestyle physical activity.
- Instruct individual(s) in a variety of physical activities by describing, demonstrating, and modifying, when appropriate, acceptable and proper equipment usage and fitness techniques.
- Demonstrate organizational and administrative leadership in delivery of sport and exercise programs by establishing program direction, a risk management plan, and financial and budgetary stewardship.
- Demonstrate proficiency in examining, researching, surveying, assessing, and reporting qualitative and quantitative data related to sport marketing and the target market.
- Design, construct, and present sport marketing principles to include the 5 P sport marketing theory.

The Exercise Science major in the Sport and Exercise Studies program prepares students to work in health and fitness centers. From private clubs to public facilities, fitness professionals are needed

to assess, plan, and implement fitness programming to address the needs of the general public or specific clients. Students are exposed to age-span appropriate exercise planning and progressions. Risk stratification, exercise physiology, kinesiology, resistance training, as well as exercise prescription and technology are among the courses that will develop the skills necessary to gain a technical or managerial position within the fitness field.

Traditional Classes and Distance Learning Choices at Columbus State

The Sport and Exercise Studies program is proud to offer traditional and distance learning options for our students. The traditional class room experience continues to provide students with high quality instruction in a small classroom setting at our main campus and off-campus locations. The Sports and Exercise Studies program also offers distance learning courses that provide the same high quality learning as traditional instruction, yet with the flexibility of being able to complete your course work online or through video based instruction.

The distance learning option for the Sport Management major requires a student to apply for admittance to the program. Some courses may require face-to-face learning or transfer credits from previous learning. Applicants should contact the Sport and Exercise Studies program coordinator for details on admission.

Students graduating from the Sport and Exercise Studies program can transfer into the following bachelor’s programs:

- Wellness and Fitness major at the California University of Pennsylvania
- Sport Management or Sport Coaching at the United States Sports Academy

Ask about our traditional learning program transfers as well!

Specific Program Admissions Information

Listed below are additional requirements for admission to the Sport and Fitness Management.

- High school graduate or GED equivalency
- Placement into ENGL 101–Beginning Composition
- Placement into MATH 101–Business Math

Sport Management Major

COURSE	CR
Quarter 1	
SES 100 Personal Fitness Concepts	3
SES 190 SES Freshman Seminar.....	1
MULT 171 Current Issues: HIV/AIDS	1
ENGL 101 Beginning Composition	3
MATH 101 Business Math	5
HOSP 153 Nutrition for a Healthy Lifestyle.....	5
TOTAL CREDIT HOURS	18
Quarter 2	
SES 101 Introduction to Sport & Exercise Studies.	3
ENGL 102 Essay & Research	3
BIO 261 Human Anatomy	5
PSY 100 Psychology	5
SES 102/104/105/106/108/109 SES Physical Education Requirement.....	1
TOTAL CREDIT HOURS	17

Quarter 3	
SES 117 Tae Kwon Do	2
SES 222or223 Tennis or Racquetball.....	2
SES 113 Aquatics Management	2
BIO 262 Human Physiology	5
BMGT 102 Managing Interpersonal Skills I	3
TOTAL CREDIT HOURS	14

Quarter 4	
SES 224 Sport Management Foundations	5
SES 231 Exercise Physiology	3
SES 232 Physical Fitness Assessment	2
SES 235 Sport Law.....	3
SSCI 101 Cultural Diversity.....	5
TOTAL CREDIT HOURS	18

Quarter 5	
SES 234 Sport Marketing	5
SES 114 Aerobic & Group Fitness	2
SES 233 Outdoor Community Recreation.....	3
SES 292 Sport & Exercise Studies Practicum I	3
COMM 105 Speech	3
SES 116 Golf Management	2
TOTAL CREDIT HOURS	18

Quarter 6	
SES 226 Care and Prevention of Athletic Injuries	3
SES XXX Technical Elective	2
SES 294 Sports & Exercise Studies Practicum II	3
MULT 103 Responding to Emergencies (if needed)	2
HUM XXX Humanities World Civilization I	5
ENGL XXX 250 or 251 or 252	5
TOTAL CREDIT HOURS	18/20
TOTAL DEGREE CREDIT HOURS	103-105
Students should request a plan of study from their faculty advisor.	

Technical Electives must be selected from the following list of courses

SES 102 Women’s Total Body Conditioning.....	1
SES 104 Beginning Yoga.....	1
SES 105 Introduction to Resistance Training	2
SES 106 Beginning Golf.....	1
SES 108 Women’s Self Defense	1
SES 109 Beginning Bowling	1
SES 113 Aquatics Management	2
SES 114 Aerobic & Group Fitness	2
SES 115 Intermediate Resistance Training.....	2
SES 222 Tennis	2
SES 223 Racquetball	2
SES 225 Athlete Intervention	3
SES 217 Advanced Tae Kwon Do	2

Physical & Recreation Instruction Major

COURSE	CR
Quarter 1	
SES 100 Personal Fitness Concepts	3
SES 190 SES Freshman Seminar.....	1
HOSP 153 Nutrition for a Healthy Lifestyle	5
MULT 171 Current Issues: HIV/AIDS	1
ENGL 101 Beginning Composition	3
MATH 135 Elementary Statistics	5
TOTAL CREDIT HOURS	18
Quarter 2	
SES 101 Introduction to Sport & Exercise Studies.	3
ENGL 102 Essay & Research	3
BIO 261 Human Anatomy	5
PSY 100 Psychology	5
SES 102/104/105/106/108/109 SES Physical Education Requirement.....	1
TOTAL CREDIT HOURS	17
Quarter 3	
SES 225 Athlete Intervention.....	3
SES 230 Fitness Concepts for Special Populations.....	3

SES 280	History of Sport.....	3
BIO 262	Human Physiology.....	5
PSY 200	Educational Psychology.....	5
TOTAL CREDIT HOURS		19

Quarter 4

SES 224	Sport Management Foundations.....	5
SES 231	Exercise Physiology.....	3
SES 232	Physical Fitness Assessment.....	2
SES 235	Sport Law.....	3
SSCI 101	Cultural Diversity.....	5
SES XXX	Technical Elective.....	1
TOTAL CREDIT HOURS		19

Quarter 5

SES 241	Kinesiology.....	5
SES 298	Special Topics in Sport.....	3
PSY 261	Child Development.....	5
SES 292	SES Sport & Exercise Studies Practicum I.....	3
COMM 105	Speech.....	3
TOTAL CREDIT HOURS		19

Quarter 6

SES 226	Care and Prevention of Athletic Injuries.....	3
SES 294	Sports & Exercise Studies Practicum II.....	3
MULT 103	Responding to Emergencies (if needed).....	2
HUM 111	World Civilization I.....	5
ENGL XXX	250 or 251 or 252 Intermediate Writing.....	5
TOTAL CREDIT HOURS		18
TOTAL DEGREE CREDIT HOURS		110

Students should request a plan of study from their faculty advisor.

Technical Electives must be selected from the following list of courses

SES 102	Women's Total Body Conditioning.....	1
SES 104	Beginning Yoga.....	1
SES 105	Introduction to Resistance Training.....	2
SES 106	Beginning Golf.....	1
SES 108	Women's Self Defense.....	1
SES 109	Beginning Bowling.....	1
SES 113	Aquatics Management.....	2
SES 114	Aerobic & Group Fitness.....	2
SES 115	Intermediate Resistance Training.....	2
SES 116	Golf Management.....	2
SES 117	Tae Kwon Do.....	2
SES 215	Advanced Resistance Training.....	3
SES 217	Advanced Tae Kwon Do.....	2
SES 222	Tennis.....	2
SES 223	Racquetball.....	2
SES 233	Outdoor Community Recreation.....	3
SES 234	Sport Marketing.....	5
CHEM 100	Introduction to Chemistry.....	4

Exercise Science Major

Quarter 1

SES 100	Personal Fitness Concepts.....	3
SES 190	SES Freshman Seminar.....	1
MULT 171	Current Issues HIV/AIDS.....	1
HOSP 153	Nutrition for a Healthy Lifestyle.....	5
ENGL 101	Beginning Composition.....	3
MATH 148	College Algebra.....	5
TOTAL CREDIT HOURS		18

Quarter 2

ENGL 102	Essay & Research.....	3
CHEM 100	Introduction to Chemistry.....	4
SES 101	Introduction to Sport & Exercise Studies.....	3
BIO 261	Human Anatomy.....	5
TOTAL CREDIT HOURS		15

Quarter 3

SES 226	Care & Prevention of Athletic Injuries.....	3
SES 102/104/105/106/108/109	SES Physical Education Requirement.....	1
SES 115	Intermediate Resistance Training.....	2
SES 237	Corporate Health.....	3

BIO 262	Human Physiology.....	5
COMM 105	Speech.....	3
TOTAL CREDIT HOURS		17

Quarter 4

SES 231	Exercise Physiology.....	3
SES 232	Physical Fitness Assessment.....	2
SES 238	Aging, Fitness, & Exercise.....	3
SSCI 101	Cultural Diversity.....	5
PSY 100	Psychology.....	5
TOTAL CREDIT HOURS		18

Quarter 5

SES 215	Advanced Resistance Training.....	3
SES 235	Sport Law.....	3
SES 292	Sport & Exercise Studies Practicum I.....	3
SES 242	Excercise Prescription.....	3
HUM 111	World Civilization.....	5
TOTAL CREDIT HOURS		17

Quarter 6

SES 241	Kinesiology.....	5
SES 294	Sport & Exercise Studies Practicum II.....	3
SES 239	Quantitative Methods in Exercise Science.....	3
ENGLXXX	250 or 251 or 252.....	5
MULT 103	Responding to Emergencies (if needed).....	2
TOTAL CREDIT HOURS		16/18
TOTAL DEGREE CREDIT HOURS		101/103

Students should request a plan of study from their faculty advisor.

Exercise Specialist Certificate

COURSE CR

Quarter 1

SES 100	Personal Fitness Concepts.....	3
SES 230	Fitness Concepts for Special Populations.....	3
SES 231	Exercise Physiology.....	3
SES 232	Physical Fitness Assessment.....	2
TOTAL CREDIT HOURS		11

Quarter 2

SES 101	Introduction to Sport & Fitness Management.....	3
SES 241	Kinesiology.....	5
MULT 103	Responding to Emergencies.....	2
MULT 171	Current Issues: HIV/AIDS.....	1
TOTAL CREDIT HOURS		11

Quarter 3

SES 215	Advanced Resistance Training.....	3
SES 234	Sport Marketing.....	5
SES 292	Sport & Fitness Management Practicum I.....	3
TOTAL CREDIT HOURS		11

Quarter 4

SES 294	Sport & Fitness Management Practicum II.....	3
SES 239	Quantitative Methods in Exercise Science.....	3
TOTAL CREDIT HOURS		6
TOTAL CERTIFICATE CREDIT HOURS		39

Supply Chain Management

Supply Chain Management Associate Degree Purchasing Major International Commerce Major International Commerce Certificate Purchasing Certificate Supply Chain Management Certificate

Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. It also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, Supply Chain Management integrates supply and demand management within and across companies, both domestically and internationally. The greater Columbus metropolitan area is home to many distribution operations including centers for Limited Brands, Spiegel, Eddie Bauer, JC Penney, Kraft, Consolidated Stores Corporation, and McGraw-Hill Companies, and it is home to the only "Free Trade Zone" in the state of Ohio.

The Purchasing major is designed to provide focused skills in purchasing and negotiation to students interested in this field. This major is built upon a solid foundation in current supply chain management theory and practice included in the National Association of Purchasing Managers certification examination.

Supply Chain Management certificates can be earned in General Supply Chain Management, Purchasing, and International Commerce. Each certificate can be completed totally in a distance learning format. Courses for these certificates follow the guidelines and cover the content established by the Certified Logistics Managers Association (CLM), the Institute for Supply Management (ISM) and The North American Small Business International Trade Educators (NASBITE) respectively, in their certification exams.

Supply Chain Management graduates may expect entry-level, first-line management positions as supervisors and managers in such areas as traffic and transportation, inventory management, warehousing, export/import, purchasing, materials control, traffic and operations management.

Columbus State Community College is nationally accredited by the Association of Collegiate Business Schools and Programs (ACBSP) for the offering of its business programs that culminate in the Associate of Arts, Associate of Science and Associate of Applied Science degrees.

Upon completion of the Associate of Applied Science Degree in Supply Chain Management, the graduate will be able to:

- Describe the various functions that comprise supply chain management and describe the interrelationship between them and other functional areas within a company.
- Be able to make channel-related decisions to satisfy industrial and consumer wants in both domestic and international markets.
- Demonstrate knowledge of supply chain management terminology and technologies including inventory techniques, bar-coding systems, picking and delivery processes, and storage and sorting systems.

- Demonstrate knowledge of the function and operation of warehouses and distribution facilities.
- Explain the role of inventory control and management
- Describe the traffic management function and its role in carrier selection, rate determination and rate negotiation.
- Demonstrate knowledge of state and federal laws that impact the distribution function, including knowledge of common carrier obligations.
- Participate in the development of an integrated plan of action consistent with established supply chain management goals.
- Understand the analytical tools useful in supply chain management particularly as they relate to measuring and analyzing productivity.
- Possess a basic understanding of industrial safety issues particularly as they relate to the development of a basic safety program.
- Understand the principles of interactive management and how they apply to managing worker performance, retention/hiring procedures, and developing collaborative action plans.
- Possess fundamental supervisory skills including setting performance objectives, coaching and feedback, and conducting formal performance reviews.

Purchasing Major

In addition to the Supply Chain Management competencies, a graduate with a Purchasing major will be able to:

- Explain and implement a Lowest Total Cost plan.
- Explain and develop purchasing objectives.
- Explain how Policies and Procedures are utilized to affect purchasing plans.
- Explain how Purchasing Organizations should be utilized.
- Explain how use of specifications, descriptions and standards are utilized to help determine right quality.
- Explain how the industrial purchasing function operates.
- Explain how the not for profit purchasing function operates.
- Explain how and why "make vs. buy" and outsourcing decisions are made.
- Develop a supplier management plan that ensures development of, evaluation, and selection of the right supplier.
- Explain pricing principles and what methods are best utilized for determining the right price.
- Explain the different types of contracts and under what conditions and situations each works best.
- Explain how negotiations can help resolve nonprice issues that help support the lowest total cost principle.
- Explain how, why, and when international purchasing is best.
- Develop and present a purchasing strategic and tactical plan.
- Develop and present a buying plan and inventory management plan that ensures both right quantity and right time.
- Explain the ethical and legal issues that effect purchasing.
- Explain the what, why, and how of negotiation.
- To explain and develop negotiation strategies, tactics, and objectives.

International Commerce Major

As the sixth largest exporting state in the U.S., Ohio values international commerce. State capital, Columbus, and its environs are a hub for international shipping and commerce. Columbus is the USA's third largest port of entry for textiles, home to more than 40 freight forwarding companies, and home to more than 132 internationally owned firms with over 26,650 employees. The International Commerce major is designed to respond to the need for an educated workforce at all levels of the career ladder within such organizations. Grounded in fundamental courses in supply chain management—transportation, global shipping, global marketing, etc.—this major also includes a three-quarter language sequence in Spanish or Chinese, as well as supplemental courses in business culture and economics to broaden and deepen student understanding of the complexities of international commerce. A travel-abroad component is part of the program, too.

In addition to the Supply Chain Management competencies, a graduate with an International Commerce major will be able to:

- Describe and discuss the nature of globalization in today's world.
- Recognize the exponential growth of international trade and the economic impact of international logistics activities.
- Understand the importance of a country's infrastructure to an international logistician.
- Identify the characteristics of the international transportation infrastructure.
- Understand how Incoterms are used to share responsibilities between exporters and importers.
- Understand the advantages/disadvantages of alternative terms of payment used in international commerce.
- Understand the risks that currency exchange rates pose for international traders.
- Identify and understand the basic purpose and function of the various required documents common to international trade.
- Explain cultural, social, economic, and political factors that impact organizations.
- Describe the roles of verbal and nonverbal communication in cross-cultural encounters.
- Evaluate strategies for effective negotiation and training of global managers
- Gain an awareness of the language of international marine insurance.
- Identify the types of air/ocean transportation services and aircraft/vessel sizes.
- Identify and understand the characteristics of intermodal transportation and the functions of international transportation forwarders and brokers.
- Converse at a basic business level in Spanish or Chinese
- Understand the significance and need for adequate packaging practices in international trade.

Supply Chain Management Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
MKTG 111	Marketing Principles.....5
LOGI 100	Principles of Supply Chain Management .....5
LEGL 264	Legal Environment of Business .....4
HRM 121	Human Resources Management .....4
TOTAL CREDIT HOURS	.....21
Quarter 2	
ENGL 102	Essay & Research .....3
ACCT 106	Introduction to Accounting I .....5
LOGI 110	Transportation & Traffic Management. ....4
COMM 105	Speech.....3
MATH 103	Beginning Algebra II.....4
TOTAL CREDIT HOURS	.....19
Quarter 3	
LOGI 151	Purchasing Principles.....3
ACCT 107	Introduction to Accounting II.....5
HUM XXX	Humanities 111,112,113,151,152 or 224 .....5
MATH 135	Statistics .....5
TOTAL CREDIT HOURS	.....18
Quarter 4	
FMGT 201	Business Finance.....5
ENGL 200	Business Communications .....3
LOGI 210	Warehouse Management .....4
LOGI 229	International Transportation Regulatory Compliance.....4
TOTAL CREDIT HOURS	.....16
Quarter 5	
LOGI 211	Inventory Management .....4
LOGI 225	International Shipping.....5
ECON 200	Principles of Microeconomics .....5
MKTG 226	Customer Service Principles & Practices .....4
BMGT 257	Project Management .....3
TOTAL CREDIT HOURS	.....21
Quarter 6	
LOGI 260	Performance Management for Logistics Managers .....4
LOGI XXX	Elective .....3
MKTG 229	Organizational Marketing .....3
SSCI 100	Globalization and the Social Science Perspective .....5
NSCI 101	Natural Science 1 .....5
TOTAL CREDIT HOURS	.....20
TOTAL DEGREE CREDIT HOURS	.....110
Technical Electives	
ECON 200	Microeconomics.....5
LOGI 152	Purchasing Principles II .....3
LOGI 205	Freight Claims .....2
LOGI 226	Introduction to Export Administration Regulations.....4
LOGI 227	Electronic Import/Export Documentation.....2
LOGI 228	Importing.....4
LOGI 229	International Transportation Regulatory Compliance.....4
LOGI 241	Logistics Practicum .....4
LOGI 242	Logistics Seminar .....2
LOGI 245	Transportation Rates/Pricing .....2
LOGI 246	Purchasing Negotiation Principles.....3
LOGI 256	Advanced Purchasing .....3
LOGI 250	Transportation of Hazardous Materials.....3
LOGI 297	Special Topics in Logistics .....1-3
QUAL 240	Total Quality Management .....3
ENVR 252	Hazardous Material Handling .....3

Purchasing Major

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
MKTG 111	Marketing Principles	5
LOGI 100	Principles of Supply Chain Management	5
ECON 200	Principles of Microeconomics	5
TOTAL CREDIT HOURS		18

Quarter 2		
ENGL 102	Essay & Research	3
ACCT 106	Introduction to Accounting I	5
LOGI 110	Transportation & Traffic Management	4
COMM 105	Speech	3
MATH 103	Beginning Algebra II	4
TOTAL CREDIT HOURS		19

Quarter 3		
MKTG 226	Customer Service Principles and Practices.....	4
ACCT 107	Introduction to Accounting II.....	5
HUM XXX	Humanities 111,112,113,151, 152 or 224	5
MATH 135	Statistics	5
TOTAL CREDIT HOURS		19

Quarter 4		
FMGT 201	Business Finance	5
ENGL 200	Business Communications	3
LOGI 151	Purchasing Principles	3
LOGI 210	Warehouse Management	4
LOGI 211	Inventory Control	4
TOTAL CREDIT HOURS		19

Quarter 5		
LOGI 246	Purchasing Negotiation.....	3
ECON 240	Principles of Macroeconomics.....	5
LOGI 152	Purchasing Principles II	3
SSCI 100	Cultural Diversity.....	5
LOGI 229	International Transportation Regulatory Compliance.....	4
TOTAL CREDIT HOURS		20

Quarter 6		
LOGI 256	Advanced Purchasing Seminar	3
LOGI XXX	Elective	3
MKTG 229	Organizational Marketing	3
LOGI 260	Performance Management for Logistics Managers.....	4
NSCI 101	Natural Science I	5
TOTAL CREDIT HOURS		18
TOTAL DEGREE CREDIT HOURS		110

Technical Electives

ECON 200	Principles of Microeconomics	5
LOGI 205	Freight Claims	2
LOGI 225	International Shipping.....	4
LOGI 226	Introduction to Export Administration Regulations.....	4
LOGI 227	Electronic Import/Export Documentation.....	2
LOGI 228	Importing.....	4
LOGI 241	Logistics Practicum	4
LOGI 242	Logistics Seminar	2
LOGI 245	Transportation Rates & Pricing	2
LOGI 250	Transportation of Hazardous Materials.....	3
LOGI 297	Special Topics in Logistics	1-3
ENVR 252	Hazardous Materials Handling	3
QUAL 240	Total Quality Management	3

International Commerce Major

COURSE		CR
Quarter 1		
ENGL 101	Beginning Composition	3
MKTG 111	Marketing Principles	5
LOGI 100	Principles of Supply Chain Management	5
LOGI 110	Transportation/Traffic.....	3

ACCT 106	Introduction to Accounting I.....	5
TOTAL CREDIT HOURS		21

Quarter 2		
ENGL 102	Essay & Research	3
ECON200	Principles of Microeconomics	5
LOGI 225	International Shipping	4
BMGT219	International Business	3
MATH 103	Beginning Algebra II	4
TOTAL CREDIT HOURS		19

Quarter 3		
COMM105	Speech.....	3
LOGI226	Introduction to the EAR.....	4
HUM 111	Civilization I.....	5
MATH 135	Statistics	5
TOTAL CREDIT HOURS		17

Quarter 4		
ENGL 200	Business Communications	3
NSCI101	Natural Science I.....	5
LOGI 228	Importing	4
LOGI 211	Inventory Control	4
SPAN101 or CHIN101	Elementary Spanish I or Elementary Chinese I	5
TOTAL CREDIT HOURS		21

Quarter 5		
LOGI 229	International Transportation Regulatory Compliance.....	3
GEOG200	Geography	5
SSCI 101	Globalization and the Social Sciences	5
SPAN102 or CHIN102	Elementary Spanish II or Elementary Chinese II.....	5
TOTAL CREDIT HOURS		18

Quarter 6		
LOGI 205	International Freight Claims	3
MKTG 270	Global Marketing	5
LOGI XXX	Technical Elective.....	2
SPAN105 or CHIN105	Business Spanish or Business Chinese	4
TOTAL CREDIT HOURS		14
TOTAL DEGREE CREDIT HOURS		110

International Commerce Certificate

COURSE		CR
Quarter 1		
LOGI 225	International Shipping.....	5
TOTAL CREDIT HOURS		5

Quarter 2		
LOGI 226	Introduction to Export Administration Regulations.....	4
LOGI 228	Importing.....	4
LOGI 229	International Transportation Regulatory Compliance.....	4
BMGT 219	International Business.....	3
TOTAL CREDIT HOURS		16

Quarter 3		
LOGI 227	Electronic Import/Export Documentation.....	2
MKTG 270	Global Marketing	6
TOTAL CREDIT HOURS		8
TOTAL CERTIFICATE CREDITS		29

Purchasing Certificate

COURSE		CR
Quarter 1		
LOGI 151	Purchasing Principles I	3
LOGI 211	Inventory Management	4
TOTAL CREDIT HOURS		7

Quarter 2		
HRM 121	Human Resources Management	4
LOGI 152	Purchasing Principles II	3
TOTAL CREDIT HOURS		7

Quarter 3		
LOGI 246	Purchasing Negotiation	3
LOGI 256	Advanced Purchasing Seminar	3
TOTAL CREDIT HOURS		6
TOTAL CERTIFICATE CREDITS		20

Supply Chain Management Certificate

COURSE		CR
Quarter 1		
LOGI 151	Purchasing Principles I	3
LOGI 210	Warehouse Management	4
TOTAL CREDIT HOURS		7

Quarter 2		
LOGI 110	Transportation and Traffic Management	4
LOGI 211	Inventory Management	4
TOTAL CREDIT HOURS		8

Quarter 3		
LOGI 225	International Shipping	5
LOGI 229	International Transportation Regulatory Compliance	4
TOTAL CREDIT HOURS		8
TOTAL CERTIFICATE CREDITS		24

Surgical Technology

Surgical Technology Certificate Surgical Technology Associate Degree

Surgical Technology is a dynamic and exciting allied health profession. The surgical technologist is a vital member of the allied health field of professionals who work closely with surgeons, anesthesiologists, registered nurses, and other personnel delivering surgical patient care.

Columbus State Community College offers a four-quarter academic/laboratory/clinical Certificate Surgical Technology program concurrent with a six-quarter academic/laboratory/clinical quarter Associate of Applied Science Degree program.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits the Certificate and Associate Degree programs. Graduates are eligible to obtain national certification as a Certified Surgical Technologist (CST) upon successful examination administered by the Liaison Council on Certification for the Surgical Technologist (LCC-ST).

Upon completion of the Surgical Technology Certificate, the student will be able to:

- Demonstrate knowledge and practice of basic patient care concepts.
- Demonstrate the application of the principles of asepsis in

a knowledgeable manner that provides for optimal patient care in the operating room.

- Demonstrate basic surgical case preparation skills in the sterile processing role (STSP) and transportation/communication role (STTC).
- Demonstrate the ability to perform the role of first scrub (STSR) and second scrub (STSR2) on basic surgical cases.
- Demonstrate responsible behavior as a health care professional.

Upon completion of the associate degree in Surgical Technology, the graduate will be able to:

- Demonstrate all competencies required for the certified Surgical Technologist (CST). Demonstrate advanced knowledge and practice of patient care techniques.
- Demonstrate advanced knowledge of sterile and surgical technique.
- Demonstrate advanced knowledge and practice in the role of the first scrub (STSR) and second scrub (STSR2).
- Demonstrate knowledge and practice of circulating skills and tasks (STAC).
- Demonstrate knowledge relating to operating room emergency situations.
- Demonstrate advanced organizational skills.
- Demonstrate advanced knowledge in one or two surgical specialty areas.
- Demonstrate a professional attitude.

Specific Program Admission Information

Listed below are additional requirements for admission to the Surgical Technology Program.

College Placement Testing

- Placement testing into MATH 104 or completion of MATH 103. A student who has college algebra transfer credit of a grade of "C" or better, are not required to take placement test.
- Placement testing into ENGL 101 or ENGL 111 or completion of ENGL 100. Student who has college transfer credit for ENGL 101 are not required to take placement test.
- Placement testing above the reading requirements or completion of DEV 044. Student who has college transfer credit for ENGL 101 are not required to take placement test.

Course Completion of the Following:

- High school graduate or GED equivalency
- High school biology, (grade of "C" or better,) within the past five years or BIO 100 or BIO 101 (with a grade of "C" or better)

College Course Completion (or successful completion of equivalent approved training) for:

- CHEM 113 with a grade of "C" or better
- NURC 101 Nurse-Aide Training Program
- NURC 102 Patient Care Skills I
- HIMT 121 Advanced Medical Terminology
- Grade Point Average of 2.5 or better in courses related to the Surgical Technology Plan of Study

Upon acceptance into the Surgical Technology, the following additional items are required to be completed by the student before registration for Autumn Quarter will be allowed:

- MULT 102 Cardiopulmonary Resuscitation
- Completed Health Records on file at the Health Records Office, including drug testing and back ground check.

Acceptance is conditional on the submission and clearance of student background history by Columbus State Community College's Public Safety Department and drug screening clearance by the Columbus State Community College's Health Records Office. You can obtain additional information at the program information sessions or by contacting Kelly Fannin at (614) 287-5511

Statement Regarding Infectious Diseases

Students in this program, perform their clinical work on real people. Columbus State does not discriminate against students, faculty, or patients in any way, or based on color, creed, national origin, gender, disability or sexual preference. The patient populations with whom we work come from all walks of life, and the students may therefore be exposed to many types of communicable diseases. These are not limited to but may include Hepatitis (A, B, C or D), HIV/AIDS, TB, Measles, German measles, and Mumps.

All students are required to have appropriate immunizations after they are admitted to the program (information is given to all admitted students). Additionally, although all precautions are taken to minimize exposure and risk, there is always a slight possibility that precautions may fail or that a student may accidentally expose him/herself. All students entering the program must be aware of this slight, but real, potential. All students are encouraged to have personal health insurance in effect by the first day of class.

Surgical Technology Certificate

COURSE	CR
Quarter 1	
SURG 102 Surgical Technology I	7
ENGL 101 Beginning Composition	3
BIO 261 Human Anatomy	5
TOTAL CREDIT HOURS	15
Quarter 2	
SURG 104 Surgical Technology II	7
BIO 262 Human Physiology	5
ENGL 102 Essay & Research	3
TOTAL CREDIT HOURS	15
Quarter 3	
SURG 202 Surgical Technology III	9
HIMT 141 Pharmacology	3
TOTAL CREDIT HOURS	12
Quarter 4	
SURG 204 Surgical Technology IV	9
SSCI XXX Social Sciences 100, 101, 102, 104, 105	5
TOTAL CREDIT HOURS	14
TOTAL CERTIFICATE CREDIT HOURS	56

Surgical Technology Associate Degree

Quarter 1	
SURG 102 Surgical Technology I	7
ENGL 101 Beginning Composition	3
BIO 261 Human Anatomy	5
TOTAL CREDIT HOURS	15

Quarter 2	
SURG 104 Surgical Technology II	7
BIO 262 Human Physiology	5
ENGL 102 Essay & Research	3
TOTAL CREDIT HOURS	15

Quarter 3	
SURG 202 Surgical Technology III	9
HIMT 141 Pharmacology	3
TOTAL CREDIT HOURS	12

Quarter 4	
SURG 204 Surgical Technology IV	9
SSCI XXX Social Sciences 100, 101, 102, 104, or 105	5
TOTAL CREDIT HOURS	14

Quarter 5	
SURG 250 Surgical Technology V	7
BIO 115 General Microbiology	5
HUM XXX Humanities, 111, 112, 113, 151, 152, or 224	5
TOTAL CREDIT HOURS	17

Quarter 6	
SURG 251 Surgical Technology VI	7
BIO 263 Human Pathophysiology	5
ENGL XXX 200 or 202 or 204	3
COMM XXX 105 or 110	3
TOTAL CREDIT HOURS	18
TOTAL DEGREE CREDIT HOURS	91

Technical Communication Associate Degree

In the areas of business, industry, government, healthcare, and technology, there is a need to communicate information of a technical nature to different audiences. Technical Communication is the process of translating technical information into forms that different audiences can understand and use. Technical communicators are the translators. They, write, edit, and perform page layout and design on user manuals, textbooks, training materials, press releases, memos, environmental impact statements, video scripts, and online help files. They design Web pages, develop computer-based training (CBT) modules, prepare multimedia presentations, and develop material for delivery on CD-ROM.

The Associate of Applied Science Degree in Technical Communication at Columbus State Community College is the only technical communication degree program in central Ohio. The program provides students with the practical, specific skills and technical knowledge needed to get entry-level jobs as technical communicators. All the courses are taught in a state-of-the-art computer classroom so that students become familiar with a variety of computer applications.

The program is designed to be completed within six quarters of full-time study. Students are required to take eleven courses in Technical Communication (TCO courses) and an additional 15-25 credits in a single cognate (specialization) area. The choice of the cognate area is up to the student in consultation with the Technical Communication advisor and the advisor in the cognate area. Currently there are over 20 approved cognates in areas such as accounting, aviation maintenance, computer programming, marketing, microcomputing, and graphic communications. For a complete listing, contact the Technical Communication program coordinator.

A technical communicator should be able to discuss projects with a technical expert and suggest the best way to translate information so that the targeted audience will understand it. The cognate area enhances the knowledge and skills of the technical communicator and provides vocabulary and basic knowledge about the chosen field.

Upon completion of the Associate of Applied Science Degree in the Technical Communication, the graduate will be able to:

- Write in the forms most often required of a technical communicator (e.g., processes and procedures, reports, manuals, etc.).
- Translate complex material into clear, concise and easy-to-use terms for specific targeted audiences. Participate in the entire technical writing cycle both individually and collaboratively—planning, researching, and coordinating projects; writing, revising, and editing documents; designing and placing graphics; and producing a final product.
- Prepare and deliver oral presentations, both in formal and informal settings.
- Develop basic graphics and integrate them into text.
- Apply the principles learned in technical cognates to technical communication.
- Critically evaluate existing documentation for clarity, completeness, and general effectiveness.
- Operate the word processors and desktop design packages that are most widely used in the technical communication field.
- Incorporate the basic concepts of multimedia production into professional technical presentations.
- Edit documents individually and collaboratively using both hard copy and online methods.
- Carry out, prepare, and produce documented primary or secondary research.
- Demonstrate an understanding of concepts of time/project management both in individual and team projects.

Note: Courses taught at a distance (Distance learning [DL]) may have a higher lab fee than traditionally taught courses.

Technical Communication Associate Degree

COURSE	CR
Quarter 1	
ENGL 101	Beginning Composition .....3
TCO 101	Careers in Technical Communication .....2
CIT 101	PC Application 1 .....3
*	Technical Cognate .....3-6
XXXX XXX	Math or Science Elective for Tech Cognate .....5
TOTAL CREDIT HOURS	16-19

Quarter 2	
ENGL 102	Essay & Research .....3
OADM 101	Business Grammar Usage .....3
HUM XXX	Humanities 111, 112, 113, 151, 152 or 224 .....5
TCO 102	Tools and Tips for Technical Communicators .....3
TCO 203	Introduction to Technical Communication .....3
TOTAL CREDIT HOURS	17

Quarter 3	
OADM 167	Desktop Publishing Using PageMaker .....3
COMM 105	Speech .....3
NSCI 191	Natural Science I .....5
TCO 204	Introduction to Technical Editing .....3
*	Technical Cognate .....3-6
TOTAL CREDIT HOURS	17-20

Quarter 4	
ENGL 200	Business Communications .....3
TCO 223	Advanced Technical Communication .....3
GRPH 251	Electronic Imaging .....3
TCO 214	Document Design & Delivery Methods .....3
*	Technical Cognate .....3-6
TOTAL CREDIT HOURS	15-18

Quarter 5	
COMM 110	Conference and Group Discussion .....3
TCO 215	Online Documentation .....3
TCO 230	Technical Presentations .....3
XXX XXX	Technical Writing Elective .....3
*	Technical Cognate .....3-6
TOTAL CREDIT HOURS	15-18

Quarter 6	
SSCI 101	Cultural Diversity .....5
TCO 250	Capstone Project .....3
TCO 260	Career Development .....1
TCO 290	Industry Internship .....4
*	Technical Cognate .....3-6
TOTAL CREDIT HOURS	16-19
TOTAL DEGREE CREDIT HOURS	93-108

*Between 15-25 hours must be completed in a Technical Cognate.

Technical writing electives may be selected from the following courses:

ENGL 202	Writing for the Health and Human Services .....3
ENGL 206	Governmental Communications .....3
ENGL 208	Communication for the Mass Media .....3
ENGL 215	Magazine Publication .....3
ENGL 280	Publishing Practicum .....2
TCO 221	Proposal Development .....3
TCO 222	Developing Software Documentation .....3
TCO 224	Advanced Technical Editing .....3
TCO 235	Instructional Design .....2
TCO 236	Computer-Based Training .....3
TCO 237	Digital Video Production for the Workplace .....3
TCO 245	HTML-Based Online Documentation .....5
TCO 297, 298, 299	Special Topics in Technical Communication .....1-5

Veterinary Technology

Veterinary technicians are registered, certified or licensed members of the veterinary health care team. They play an integral role in many areas of veterinary clinical practice, including medical, surgical, laboratory, and office procedures. All tasks are performed under the supervision of a licensed veterinarian. Compassion for animals is essential, because the main focus of individuals employed as veterinary technicians is the treatment and nursing of healthy and sick animals.

The American Veterinary Medical Association accredits Columbus State's Veterinary Technology Program. The Associate of Applied Science Degree in Veterinary Technology provides students with both classroom and clinical experiences. Students have the opportunity to intern at The Ohio State University Veterinary Teaching Hospital. Students will also spend a portion of their clinical experience in various veterinary settings, including research centers, private clinical practices, veterinary emergency hospitals, veterinary diagnostic laboratories, and zoos. Columbus State Community College emphasizes safety and disease prevention because students and employees in health care professions may be exposed to infectious materials, communicable, and zoonotic diseases.

Columbus State Community College also offers an evening Veterinary Technology program designed for the working student. The evening program can be completed in nine quarters with courses starting no earlier than 5:00 p.m. Some daytime availability may be required during the Clinical Experience A-D courses.

For students interested in equine health, a joint program has been developed between Columbus State's Veterinary Technology and Otterbein College's Department of Equine Science. Successful completion of these two programs will result in an Associate of Applied Science Degree in Veterinary Technology from Columbus State Community College, and the Bachelor of Arts Degree in Equine Health Technology from Otterbein College. For students interested in animal science, a joint program has been created between Columbus State's Veterinary Technology and The Ohio State University's Department of Animal Science. Successful completion of these two programs will result in an Associate of Applied Science Degree in Veterinary Technology from Columbus State Community College, and the Bachelor of Science Degree in Agriculture from The Ohio State University. Special advising with the program coordinator is necessary for students who wish to participate in these joint programs.

Please note that there may be changes to the Veterinary Technology program admission requirements and curriculum periodically. Any admission criteria or curriculum changes will be updated at the Veterinary Technology Mandatory Information Sessions.

Upon completion of the Associate of Applied Science Degree in Veterinary Technology, and under the supervision of a licensed veterinarian, the graduate will be able to:

- Perform physical examinations and maintain records for patient animals in a veterinary health care setting.

- Effectively communicate preventative medicine, treatment protocols, dental health, and medical and surgical procedures to veterinary clients.
- Prepare and dispense medications according to a prescription, perform drug dosage calculations and maintain controlled drug records.
- Administer and understand the effects of treatments and/or medications delivered either orally or parenterally.
- Apply wound dressings, bandages, and splints.
- Collect and prepare patient specimens for clinical laboratory procedures including blood samples, urine samples, and skin scrapings.
- Perform clinical laboratory procedures, including complete blood counts, serum chemistries, microbiology, immunologic testing, urinalysis, and cytology.
- Identify internal, external, and blood parasites of domestic animal species.
- Perform routine procedures on laboratory animals (rats, mice, guinea pigs, rabbits). Other experiences may include avian, zoo, and exotic animal medicine based on student clinical internship preference.
- Prepare equipment, instruments, animals, and medications for surgical, diagnostic, and anesthetic procedures.
- Administer and effectively monitor anesthesia, including anesthetic induction, maintenance, and recovery by inhalation and/or parenteral routes.
- Assist in diagnostic, medical, and surgical procedures, including post-operative management, pain control, and skin closure.
- Perform complete routine dental prophylaxis.
- Administer and monitor basic and/or intensive nursing care, including fluid therapy and nutritional management.
- Position animals for diagnostic imaging procedures. Expose and develop radiographs using safe and proper technique.

Graduates register with the Ohio Veterinary Medical Licensing Board to become Registered Veterinary Technicians in the State of Ohio. Graduates are eligible to take the Veterinary Technician National Exam (VTNE) that is recognized in more than 40 states to certify veterinary technicians. Students must successfully pass the VTNE to be eligible for licensure in the State of Ohio.

Specific Program Admissions Information

Prospective students are required to attend an information session where they will receive the separate admission application for the Veterinary Technology Program. Detailed admission criteria, plans of study, and career opportunities are also discussed. These sessions are held periodically throughout the year, and are very helpful in answering the prospective students' questions. General information packets and information session dates and times may be obtained by contacting the office associate at (614) 287-5511 or by sending an e-mail request to kfannin@csc.edu.

The yearly deadline for application and completion of admission requirements is March 23 for admission beginning the following Summer Quarter (evening plan of study) or the following Autumn Quarter (day plans of study), based on space availability. Students must meet all admission requirements before being considered for admission into the Veterinary Technology.

Listed below are additional requirements for admission to the Veterinary Technology:

- High school graduate or GED equivalency.
- Required high school (or equivalent) courses in Biology (grade of “C” or better within the past five years) or BIO 100 or 101 (grade of “C” or better) and Chemistry (grade of “C” or better within the past three years) or CHEM 100 (grade of “C” or better).
- Placement into ENGL 101–Beginning Composition.
- Placement into “No Reading Required” (students with college transfer credit for ENGL 101 or ENGL 111 are not required to take the placement test).
- Completion of MATH 103–Beginning Algebra II with a grade of “C” or better.
- Attend a Veterinary Technology Mandatory Information Session (Applicants will receive a separate admission application for the Veterinary Technology Program at these sessions. Applicants will not be considered for admission until an information session has been attended).
- Computer literacy (high school, work-related or completion of CIT 101).
- Grade point average of 2.5 or better (most recently completed coursework).

Upon acceptance into the Veterinary Technology, the student will be required to complete the following Health Related Technology Requirements:

- Complete a Health Statement declaring all allergies, medications, and physical limitations or restrictions.
- Tuberculin Testing (Mantoux) within the past year.
- Tetanus Booster (Td) within the past eight years.
- The student must obtain health insurance coverage and keep the coverage on a continual basis while attending CSCC as a Veterinary Technology student.
- Rabies vaccination or signed waiver.
- Drug Test
- Background Check

Acceptance is conditional on the submission and clearance of student background history by Columbus State Community College's Public Safety Department and drug screening clearance by the Columbus State Community College's Health Records Office. You can obtain additional information at the program information sessions or by contacting Kelly Fannin at (614) 287-5511

Veterinary Technology Associate Degree

COURSE	CR
Quarter 1	
BIO 261 Human Anatomy	5
RAD 190 Radiation Protection for the General Machine Operator	2
MATH 100 Calculations and Dosages	2
VET 101 Animal Nutrition	3
VET 102 Laboratory Animal Medicine	2
VET 114 Client Relations	2
TOTAL CREDIT HOURS	16

Quarter 2	
BIO 262 Human Physiology	5
VET 122 Veterinary Parasitology	3
VET 126 Principles of Veterinary Anesthesia	4
HIMT 121 Advanced Medical Terminology	3
VET 124 Principles of Veterinary Radiology	2
TOTAL CREDIT HOURS	17

Quarter 3	
VET 131 Veterinary Anatomy and Physiology	3
VET 138 Veterinary Surgical Tech.	3
VET 136 Animal Health and Disease I	3
VET 133 Clinical Application I	3
ENGL 101 Beginning Composition	3
TOTAL CREDIT HOURS	15

Quarter 4	
ENGL 102 Essay & Research	3
SSCI XXX Social Science 100, 101, 102, 104, or 105	5
VET 135 Veterinary Hematology	5
CHEM 113 Gen. & Bio. Chemistry	5
TOTAL CREDIT HOURS	18

Quarter 5	
COMM 105 Speech or	
COMM 110 Conf. & Group Discussion	3
VET 291 Clinical Experience I	6
VET 254 Clinical Seminar I	2
ENGL 200 Business Communications	3
VET 266 Animal Health & Disease II	3
TOTAL CREDIT HOURS	17

Quarter 6	
VET 262 Vet. Pharmacology	3
VET 267 Vet. Urinalysis & Clinical Chemistry	4
VET 269 Vet. Microbiology	4
VET 263 Clinical Application II	3
TOTAL CREDIT HOURS	14

Quarter 7	
VET 293 Clinical Experience II	6
VET 274 Clinical Seminar II	2
HUM XXX Humanities 111, 112, 113, 151, 152 or 224	5
TOTAL CREDIT HOURS	13
TOTAL DEGREE CREDIT HOURS	110

An accelerated plan of study for students with prior college coursework and an evening plan of study are also offered. Students should consult with the office associate regarding these options.

All students will be required to participate in the Patient Animal Care Teams (P.A.C.T.) program during their enrollment in the Veterinary Technology. Students will be responsible for additional animal exercise, training, patient care and other related skills outside of scheduled class time. Detailed information is available at the Veterinary Technology Mandatory Information Sessions.

Notes

Course Descriptions

Columbus State's Course Numbering System

No two courses at Columbus State have the same course number. The three or four-letter alpha identifier indicates the department, and the three numbers indicate the specific course within each department.

Listed below are the various departments in alphabetical order. Refer to this chart to find the department in which a given course can be found. For example, ACCT 106 Introduction to Accounting would be found in the Course Descriptions section under Accounting (ACCT).

Accounting.....	ACCT	History.....	HIST
Anthropology.....	ANTH	Hospitality Management.....	HOSP
Applied Technologies.....	APPL	Human Resources Mgmt.....	HRM
Appraisal.....	APPR	Humanities.....	HUM
Arabic.....	ARAB	Interactive Media.....	IMMT
Architecture.....	ARCH	Interpreting/ASL Education.....	ITT
Art.....	ART	Italian.....	ITAL
Arts & Sciences.....	ASC	Japanese.....	JAPN
Automotive Technology.....	AUTO	Landscape Design/Build.....	LAND
Aviation Maintenance		Latin.....	LATN
Technology.....	AVI	Law Enforcement.....	LAWE
Biology.....	BIO	Legal Medical Asst.	LEGL/HIMT
Business Management.....	BMGT	Literature.....	ENGL
Chemistry.....	CHEM	Marketing.....	MKTG
Civil Engineering		Massage Therapy.....	MASS
Technology.....	CIVL	Mathematics.....	MATH
Communication Skills.....	COMM	Mechanical Engineering	
Computer Information		Technology.....	MECH
Technology.....	CIT	Medical Assisting.....	MAT
Construction Management.....	CMGT	Medical Laboratory	
Dance.....	DANC	Technology.....	MLT
Dental Hygiene.....	DHY	Mental Health/Chemical	
Dental Laboratory		Dependency/Mental	
Technology.....	DENT	Retardation.....	MHCR
Developmental Education.....	DEV	Mental Health/Chemical	
Dietary Manager.....	DMGR	Dependency/Mental	
(See Hospitality Management)		Retardation Module.....	MHC
Dietetic Technician.....	DIET	Multi-Competency Health.....	MULT
(See Hospitality Management)		Music.....	MUS
Digital Design & Graphics.....	GRPH	Natural Science.....	NSCI
Digital Photography.....	FOTO	Nuclear Medicine Tech.....	NUC
Early Childhood Development.....	ECD	Nursing.....	NURS
Economics.....	ECON	Office Administration.....	OADM
Electro-Mechanical		Office Admin. Module.....	OAD
Engineering Technology.....	EMEC	Paralegal Studies.....	LEGL
Electronic Engineering		Philosophy.....	PHIL
Technology.....	EET	Physics.....	PHYS
Emergency Medical Services		Political Science.....	POLS
Technology.....	EMS	Practical Nursing.....	PNUR
English.....	ENGL	Psychology.....	PSY
English Module.....	ENG	Quality Assurance Tech.....	QUAL
English as a Second Language... ESL		Radiography.....	RAD
Environmental Science, Safety		Real Estate.....	REAL
and Health.....	ENVR	Respiratory Care.....	RESP
Facility Management.....	FAC	Social Sciences.....	SSCI
Finance.....	FMGT	Sociology.....	SOC
Fire Science.....	FIRE	Spanish.....	SPAN
French.....	FREN	Spanish Module.....	SPN
Geographic Info Systems.....	GIS	Sport & Exercise Studies.....	SES
Geography.....	GEOG	Supply Chain Management.....	LOGI
Geology.....	GEOL	Surgical Technology.....	SURG
German.....	GERM	Surveying.....	SURV
Health Information		Technical Communication.....	TCO
Management Technology.....	HIMT	Theater.....	THEA
Health Information		Veterinary Technology.....	VET
Management Module.....	HIM		
Heating, Ventilating & Air			
Conditioning Technology.....	HAC		

Explanation of Course Description Codes

Department

Specific Course Quarters Offered

Also available via distance learning

ACCT 106 Introduction to Accounting I **5 credits**

(A,W,SP,SU-DL)

The uses of accounting reports for business entities; focus on the uses of accounting for external reporting, emphasizing accounting as a provider of financial information. This course is intended for students who plan to transfer to a four-year college or university to complete a Bachelor's Degree. This course is also offered in a distance learning mode. Not open to Accounting majors

Lecture: 5 hours Lab: 0 hours

Lab fee: \$2.00

Class hours Lab hours

Course Number—The three- or four-letter alpha identifier indicates the department; the three numbers that follow identify the specific course. Three of four letters followed by xxx indicate an elective requirement for which only the department is specified; here the student may choose the specific course, subject to approval of his/her advisor. Where no alphabetical or numerical characters appear, the elective may come from more than one department.

Quarter Offered—Indicates which quarter or quarters the course is offered during the year. A- Autumn; W-Winter; SP-Spring; SU-Summer.

Prerequisites—Any coursework that must be completed before the student is eligible to enroll for the course. For example, if ENGL 101 were listed as a prerequisite for a course, then only students who have completed ENGL 101 would be eligible to register for the course.

Corequisite Courses—Any coursework that must be completed during the same quarter as the course in which you are enrolling. For example, if course ACCT 271 is a corequisite with course ACCT 272, both courses must be taken during the same quarter.

Class Hours—The number of hours per week a particular course meets in a lecture classroom.

Lab Hours—The number of hours per week a particular class meets in a laboratory situation. This is usually in addition to class hours.

Credits—The number of credits to be awarded to students who successfully complete the course.

Distance Learning—Designates course is also available in a distance learning format. Courses taken in the distance learning format may be subject to a different lab fee.

Lab Fee—A fee required of students, registering in certain courses, that is used to offset the cost of consumable materials, technology, and printing in classrooms or laboratory situations.

Module—A modular course is defined as a part of the main course that can stand alone. The topics are related, and, when combined with all parts, become the entire course. Modular courses usually do not exist without the main course. Modules may have various methods of instructional delivery, i.e., faculty lectures, Web, self-paced, etc. Modular courses may run on a term basis or be flexibly scheduled. Modular courses are designated as having an alpha letter after the course number, i.e., AVI 324A, AVI 324B. these examples are two modules of the whole main course AVI 324.

Accounting Technology (ACCT)

ACCT 106 Financial Accounting (A, W, SP, SU,–DL) 5 credits

An introduction to accounting emphasizing how general purpose financial statements communicate information about the business corporation's performance and position for users external to management. Approximately one-third of the course emphasizes how the accountant processes and presents the information and includes exposure to recording transactions, adjusting balances, and preparing financial statements for service and merchandising firms according to established rules and procedures. The balance of the course examines major elements of the statements such as cash, receivables, inventory, long-lived assets, depreciation, current and long-term liabilities, and capital stock transactions. Concepts of this course are applied to ACCT 107

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Placement into ENGL 101 and Completion of MATH 101 or higher

Concurrent: ACCT 106 and ACCT 107 can be taken concurrently

Lab fee: \$2.00

ACCT 107 Managerial Accounting (A, W, SP, SU,–DL) 5 credits

A continuation of ACCT 106 with special emphasis on the uses of financial measurements, calculations, and reports used by an organization to make a variety of management decisions. Specific uses discussed are costing of products and services, decision analysis, and control and evaluation.

Lecture: 5 hours

Prerequisite: Placement into ENGL 101 and completion of MATH 101 or higher. Course can be taken concurrently with ACCT 106

Lab fee: \$2.00

ACCT 108 Introduction To Accounting III (A,W,SP,SU) 4 credits

A follow-up course to ACCT 106 and ACCT 107 that develops the mechanical phase of theoretical concepts. This course is oriented toward the accounting major to enable the student to apply double entry accounting methods toward the daily maintenance of accounting records.

Lecture: 4 hours

Prerequisite: ACCT 106 and ACCT 107

Lab fee: \$2.00

ACCT 121 Data Processing for Accountants (W, SP) 4 credits

As applied to the accounting world, in-depth practice in the varied practical applications of Microsoft Excel electronic spreadsheet.

Lecture: 4 hours

Prerequisite: ACCT 106

Lab fee: \$5.00

ACCT 126 Accounting Systems (A, W, SP, SU) 4credits

An introduction to systems fundamentals including flowcharting and internal control. A comprehensive application of accounting principles studied in ACCT 106 and ACCT 107 using microcomputers.

Lecture: 4 hours

Prerequisite: ACCT 106 and ACCT 107

Lab fee: \$5.00

ACCT 211 Cost Accounting (SP) 4 credits

A study of the field of job order cost accounting; the cost cycle methods of handling materials, labor costs, and manufacturing overhead expenditures (controllable and uncontrollable); process cost accounting; byproducts and joint products; fundamental cost-volume-profit relationships (break-even analysis); flexible budgeting and standard costs.

Lecture: 4 hours

Prerequisite: ACCT 107

Lab fee: \$2.00

ACCT 221 Fundamentals of Finance (A,–DL) 4 credits

A study of forms of business organization, source and management of working capital, financial statement presentation, tools of analysis, per-

centages, comparisons to past performance industry standards, and basic ratios including working capital.

Lecture: 4 hours

Prerequisite: ACCT 106 (FMGT 201 - Corporate Finance can be substituted for this course)

Lab fee: \$1.00

ACCT 222 Financial Analysis (W,–DL) 4 credits

A continuation of course ACCT 221; ratios of equity, return on equity and return on assets; corporate securities; financing through securities; sources and management of long-term assets, debt, and equity including capital budgeting; expansion and combinations, reorganization, receivership, and dissolution.

Lecture: 4 hours

Prerequisite: ACCT 221 or FMGT 201

Lab fee: \$2.00

ACCT 231 State and Local Taxation (SP, SU) 4 credits

Payroll taxes (withholding and reports), unemployment taxes, Workmen's Compensation, franchise taxes, personal property taxes (classified and intangible), city income taxes, Ohio personal taxes, sales and use taxes, real estate taxes, and vehicle and other taxes.

Lecture: 4 hours

Prerequisite: ACCT 106

Lab fee: \$5.00

ACCT 232 Federal Taxation I (A) 4 credits

Individual income taxes, returns, income exemptions, deductions, gains and losses, rates, adjustments. Problems of proprietorship, partnerships, corporations, inventories, depreciation accounting, installment and deferred sales treatment. Filing requirements, payments, refunds, claims. Tax planning techniques.

Lecture: 4 hours

Prerequisite: ACCT 106

Lab fee: \$5.00

ACCT 236 Federal Taxation II (W) 4 credits

A continuation of ACCT 232, including nonliquidating distributions, accumulated earnings, and undistributed income. Sub-chapter S corporations, stock redemption and partial liquidations, corporate reorganization, and estate and gift taxation.

Lecture: 4 hours

Prerequisite: ACCT 232

Lab fee: \$2.00

ACCT 241 Auditing I, Principles (W) 4 credits

A course concerned with identification of professional qualifications and responsibilities of an auditor and study of auditing concepts utilized in the investigation and appraisal of economic information. Topics of study will include the role of the auditor in society, professional ethics, auditing standards, professional liability, audit objectives, relationship of risk and materiality to audit strategies, planning and accepting an engagement, audit sampling, and an auditor's concern with internal control.

Lecture: 4 hours

Prerequisite: ACCT 251

Lab fee: \$3.00

ACCT 242 Auditing II, Applications (SP) 3 credits

A course concerned with practical application of professional qualifications and responsibilities of an auditor utilized in the investigation and appraisal of economic information. Topics of study include how to audit each of the following transaction cycles: revenue, expenditure, personnel services, productive, investing, and financing and cash. The audit report and other special reports will also be studied.

Lecture: 3 hours

Prerequisite: ACCT 241

Lab fee: \$3.00

ACCT 251 Intermediate Accounting I (A,W, SP, SU) 4 credits
A continuation of accounting theory. An in-depth study of the accounting process and accounting records; the nature and content of accounting statements: balance sheet, income statement, and retained earnings statement; analysis of working capital; analysis and methods of valuation and statement presentation of the following items: cash and receivables, inventories and property, plant and equipment.
Lecture: 4 hours
Prerequisite: ACCT 108 with a "C" or better and placement into or completion of MATH 103
Lab fee: \$1.00

ACCT 252 Intermediate Accounting II (SU, A) 4 credits
A continuation of ACCT 251 including analysis and methods of valuation and statement presentation of the following items: current liabilities, contractual and contingent items, intangible assets, deferred charges and long-term liabilities, investments, leases, equity transactions, earnings per share, statement of cash flow.
Lecture: 4 hours
Prerequisite: ACCT 251 with a "C" or better
Lab fee: \$1.00

ACCT 253 Intermediate Accounting III (AU,W) 4 credits
A continuation of ACCT 252 with emphasis on accounting for taxes, leases and current accounting issues.
Lecture: 4 hours
Prerequisite: ACCT 252 with a "C" or better
Lab Fee: \$1.00

ACCT 258 Advanced Accounting (SP) 4 credits
The study of financial accounting theory and practice relating to Accounting for business combinations, consolidated financial statements, partnerships, segment and interim reports, and foreign operations.
Lecture: 4 hours
Prerequisite: ACCT 253 with a "C" or better
Lab fee: \$1.00

ACCT 266 Public Administration/Fund Accounting (SP, SU,-DL) 4 credits
A course dealing with the principles and applications of fund accounting as it relates to state and local governments. It includes budgeting, accounting, reporting, and auditing for federal government, colleges, universities, and hospitals.
Lecture: 4 hours
Prerequisite: ACCT 251

ACCT 269 Foundations of Accounting (-DL) 5 credits
A survey course concerned with the foundations of both financial and managerial accounting. This course covers the accounting for assets, liabilities, and owner's equity, financial statements and analysis, and managerial accounting. This course is not open to students with credit for ACCT 106 or ACCT 107 and this course is intended to meet the requirements of pre-MBA students.
Lecture: 5 hours
Prerequisite: None

ACCT 271 Accounting Practicum (On Demand) 3 credits
A structured employment situation in which the student is introduced into an actual accounting office. The student is expected to perform many of the accounting procedures studied in conjunction with their other classes (i.e., bank reconciliations, payroll, journal entries, etc.) and to gain relevant experience and a limited work record. Weekly supervision of the intern is used to solve any job-related problems and to attempt to develop a sense of responsibility and a professional attitude within the student/intern.
Lecture: 3 hours
Prerequisite: ACCT 251
Co-requisite: ACCT 272

ACCT 272 Practicum Seminar (On Demand) 1 credit
A practical work experience in which the student is expected to perform several operational auditing procedures (i.e., flowcharts, organization charts, analysis of existing internal control, recommendations, etc.) related to an accounting internship position. Emphasis is placed upon analyzing and further understanding the student's working environment.
Lecture: 1 hours
Prerequisite: ACCT 251
Co-requisite: ACCT 271

ACCT 275 Fraud Examination I (On Demand) 2 credits
This course is designed for the following participants:
-A core course in the proposed Certificate of Internal Audit program.
-An elective course for the accounting major.
-Business executives interested in acquiring additional information about fraud detection, investigation, and prevention.
-Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).
Lecture: 2 hours
Prerequisite: ACCT 106

ACCT 276 Fraud Examination II (On Demand) 2 credits
This course is designed for the following participants:
-A core course in the proposed Certificate of Internal Audit program.
-An elective course for the accounting major.
-Business executives interested in acquiring additional information about fraud detection, investigation, and prevention.
-Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).
Lecture: 2 hours
Prerequisite: ACCT 275

ACCT 281 Sarbanes Oxley Act I (On Demand) 2 credits
This course is designed for the following participants:
-A core course in the proposed Certificate of Internal Audit program.
-An elective course for the accounting major.
-Business executives interested in acquiring additional information about the Sarbanes Oxley Act.
-Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).
Lecture: 2 hours
Prerequisite: ACCT 106

ACCT 282 Sarbanes Oxley Act II (On Demand) 2 credits
This course is designed for the following participants:
-A core course in the proposed Certificate of Internal Audit program.
-An elective course for the accounting major.
-Business executives interested in acquiring additional information about the Sarbanes Oxley Act.
-Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).
Lecture: 2 hours
Prerequisite: ACCT 281

ACCT 291 Internal Audit I (On Demand) 2 credits
This course is designed for the following participants:
-A core course in the proposed Certificate of Internal Audit program.
-An elective course for the accounting major.
-Business executives interested in acquiring additional information about fraud detection, investigation, and prevention.
-Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).
Lecture: 2 hours
Prerequisite: ACCT 106 & BMGT 111

ACCT 292 Internal Audit II (On Demand) 2 credits

This course is designed for the following participants:

- A core course in the proposed Certificate of Internal Audit program.
- An elective course for the accounting major.
- Business executives interested in acquiring additional information about fraud detection, investigation, and prevention.
- Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).

Lecture: 2 hours

Prerequisite: ACCT 291

ACCT 293 Operational Auditing (On Demand) 2 credits

This course is designed for the following participants:

- A core course in the proposed Certificate of Internal Audit program.
- An elective course for the accounting major.
- Business executives interested in acquiring additional information about fraud detection, investigation, and prevention.
- Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).

Lecture: 2 hours

Prerequisite: ACCT 292 & BMGT 272

ACCT 294 Internal Audit – Special Topics (On Demand) 2 credits

This course is designed for the following participants:

- A core course in the proposed Certificate of Internal Audit program.
- An elective course for the accounting major.
- Business executives interested in acquiring additional information about COSO’s Internal Control – Integrated Framework and Enterprise Risk Management.
- Individuals in need of related continuing education credit (please verify that this course qualifies for continuing education credit with your certifying organization).

Lecture: 2 hours

Prerequisite: ACCT 293

ACCT 295–299 Studies in Contemporary Accounting (On Demand) 1–5 credits

Studies in Contemporary Accounting is a specially designed course offering to meet the needs of the constantly changing accounting community and student population.

Prerequisite: Permission of Instructor

Anthropology (ANTH)

ANTH 200 Introduction to Physical Anthropology (A, W, SP, SU,–DL) 5 credits

This course introduces students to the basic concepts of biological anthropology. It discusses anthropology’s relationship with other biological and social sciences, surveys nonhuman primates, examines some aspects and examples of nonhuman behavior in depth, covers topics in current human diversity, and looks at human evolutionary history.

A distance learning version of Introduction to Physical Anthropology is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

ANTH 201 World Prehistory (A, W, SP, SU,–DL) 5 credits

This course is an overview of world prehistory. Since the majority of human existence occurred long before written records and historical documents were available, this course introduces students to the fundamentals of prehistoric archaeology. The course surveys human origins, investigates the emergence of domestication and agriculture, and explores the rise of settlements and civilization. A global perspective is taken in the study of the prehistoric human past. A distance learning version of World Prehistory is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

ANTH 202 Introduction to Cultural Anthropology (A, W, SP, SU) 5 credits

Cultural anthropology focuses on understanding human cultural diversity, using research techniques such as participant observation to explore the lifeways of groups. Topics include cross-cultural treatments of social systems such as politics, economics, family and marriage, and kinship. General theories of cultural interpretation and change are discussed in a broad geographical context. Students apply concepts and complete a “mini-project” using anthropological research techniques.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

ANTH 240 Introduction to Forensic Anthropology (A, W, SP) 5 credits

This course introduces students to the field of forensic anthropology. Forensic sciences use methods and applications from anthropology in the investigation and detection of crime, the processing of mass disasters, the recovery of war dead and missing persons, and in international human rights investigations. The course covers the development of forensic anthropology, examines the theoretical and methodological bases of forensic anthropology, and considers present applications as well as future directions in this relatively new subfield of anthropology.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ANTH 200 or BIO 161 or LAW 111

Lab fee: \$6.00

ANTH 290 Capstone Experience in Anthropology (On Demand) 3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have a special interest in continuing in a baccalaureate degree program in anthropology. Course requirements include the completion and presentation of a research project that relates to the student’s academic interest after reviewing research methodologies and findings in anthropology; assembly of a portfolio that covers student’s academic career at Columbus State Community College; and participation in summative testing of academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Completion of AA/AS core requirements *and* at least 75 hours toward the degree and five credit hours in anthropology

Lab fee: \$6.00

ANTH 293 Independent Study in Anthropology (On Demand) 1 – 5 credits

An individual, student-structured course that examines a selected topic in anthropology through intensive reading or research. The independent study elective permits a student to pursue his/her interests within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Permission of the Instructor *and* the Chairperson and one course in Anthropology
Lab fee: \$6.00

ANTH 299 Special Topics in Anthropology (On Demand) **1 – 5 credits**

A detailed examination of selected topics of interest in anthropology.
Lecture: 1 to 5 hours – Lab: 0 hours
Prerequisite: Vary
Lab fee: \$6.00

Applied Technologies (APPL)

APPL 100 The Construction Industry (A, W, SP, SU) 2 credits

This seminar course provides an overview of the vast array of opportunities in the construction industry. Students will be exposed to careers ranging from the many administrative and management career opportunities available in the industry (e.g., construction management, architecture, and civil engineering) as well as the wide range of skilled trades careers needed to build America (e.g., electrician, carpenter, operating engineer, plumber). Also covered will be the wide range of construction operations: residential, commercial, industrial, and public works.

Lecture: 2 hours – Lab: 0 hours
Prerequisite: none
Lab fee: none

APPL107 Introduction to Welding 4 credits

This course introduces the learner to the welding profession, welding tools, welding safety, oxyfuel cutting, base metal preparation, and weld quality. The ‘stick welding’ process is a focus in this course.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: none
Lab fee: \$40.00

APPL108 Fundamentals of MIG Welding 4 credits

This course focuses on basic skills in the process called MIG welding, including equipment selection and setup, filler metals, and fillet and multiple-pass welds.

Prerequisite: APPL 107
Lecture: 2 hours – Lab: 4 hours
Lab fee: \$40.00

APPL109 Basic Skills for the Construction Industry 4 credits

This course focuses on introducing the student to basic technical skills that are common to all construction trades: safety in the workplace, measuring and construction math, hand and power tool usage, blueprint reading, and basic rigging operations.

Lecture: 2 hours – Lab: 4 hours
Lab fee: \$20.00

APPL 111 MIG/TIG Welding Applications 4 credits

This course continues expands skills in MIG welding and introduces TIG welding principles. It introduces the learner to preheating and postweld heat treatment of metals and the physical and mechanical properties of metals.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: APPL108
Lab fee: \$40.00

APPL 119 Construction Trades (life skills) 3 credits

This seminar course covers a wide range of life and employability/employee skills. These skill sets are essential to successfully enter the workforce and build a career with a clear upward path.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: none
Lab fee: none

APPL 115 Introduction to Carpentry 4 credits

This course introduces the learner to the varied and complex systems that make up the carpentry trade. History of the trade, career opportunities, and types of construction are discussed. Course introduces the learner to the proper and safe use of hand and portable power tools that are used on the jobsite.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: none
Lab fee: \$20.00

APPL 116 Carpentry–Structural Framing 4 credits

This course introduces the learner to different systems within carpentry. Blueprint reading, plans and drawings are discussed. Floor, wall, ceiling, and roof framing are the focus of this course.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: APPL 115
Lab fee: \$20.00

APPL 117 Carpentry–Interior/Exterior Repair and Renovation 4 credits

Roofing applications, stairs, interior and exterior finishes, and drywall are the main focus of this course. Energy conservation, thermal and moisture applications and “green building” are introduced.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: APPL 116
Lab fee: \$20.00

APPL 125 Introduction to Electrical Work 4 credits

This course introduces the learner to the electrical profession, electrical safety, electrical tools, and basic skills. Basic electrical theory and the National Electrical Code will be introduced. The learner will engage in conduit bending, wiring single, two-way, and three-way switches. Basic AC circuitry including raceway, box, and fitting selection will be discussed.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: none
Lab fee: \$20.00

APPL 126 Electrical–Basic Wiring, Grounding and Circuits 4 credits

This course introduces the learner to electrical blueprints, conductors, conductor termination, splices, and wiring devices. Residential wiring, grounding, circuit breakers, and fuses are covered in depth. Installation of electrical services, lighting, lamps, ballasts, and components are discussed.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: APPL 125
Lab fee: \$20.00

APPL 127 Electrical–Repair and Renovation 4 credits

This course introduces the learner to motor theory and application, motor maintenance, load calculations, and over-current protection. Distribution equipment, fire alarm systems, and electrical hazards are discussed. This course helps the learner to apply basic knowledge of wiring and circuitry to diagnose and repair basic wiring problems.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: APPL 126
Lab fee: \$20.00

APPL 134 Introduction to Plumbing 4 credits

This course introduces the learner to the plumbing profession, plumbing safety, tools, plumbing math, and drawings. Plastic, copper, and cast iron pipe and fittings are discussed. Drain, waste and vent systems are introduced.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: none

Lab fee: \$20.00

APPL 135 Plumbing—Fixtures, Valves, and Faucets 4 credits

This course introduces the learner to installation and testing of DWV piping as well as installing roof, floor, and area drains. Installing and testing water supply piping, installing fixtures, valves, and faucets, and water heater installation are covered.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: APPL 134

Lab fee: \$20.00

APPL 136 Plumbing—Repair and Renovation 4 credits

This course introduces the learner to plumbing codes, types of venting, direct and special waste, and sewage and sump systems. Servicing of piping systems, fixtures, and appliances are discussed in detail.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: APPL135

Lab fee: \$20.00

Appraisal (APPR)

APPR 101 Principles of Appraisal (A, W, SP, SU) 3 credits

This is the introductory course to appraisal, establishing a firm foundation for principles, concepts, and procedures for implementation of the valuation process. Coverage includes attributes and necessary skills for the professional appraisal, identification of centers for employment opportunities or establishing individual, independent appraisal practices, the nature of value, basic appraisal principles, federal reserve system, money and capital markets, real estate markets, valuation process, data collection and analysis, neighborhood description, site and improvement description, requirements for Ohio appraiser licensing or certification, and professional appraisal designations.

Lecture: 3 hours—Lab: 0 hours

Lab fee: \$2.00

APPR 102 Procedures of Appraisal (A, W, SP, SU) 3 credits

This course covers the entire spectrum of the valuation process, centering on detailed implementation of the three approaches to valuation and correlating to a final conclusion of value. Coverage includes review of valuation process, appraisal mathematics and use of financial calculator, methods of site valuation, cost approach, sales comparison approach, income approach, reconciliation, and final conclusion of value.

Lecture: 3 hours—Lab: 0 hours

Prerequisites: APPR 101

Lab fee: \$2.00

APPR 115 Report Writing With Case Studies (A) 2 credits

This course covers techniques in writing both form and narrative appraisal reports. Course covers the logic progression appraisal format as well as writing techniques. Students will be expected to write narrative style descriptions, while applying USPAP to report writing and formatting techniques. Students will exam case studies and analyze for errors and logic consistencies.

Lecture: 1 hour—Lab: 0 hours

Prerequisites: APPR 101 and APPR 102

Lab fee: \$2.00

APPR 211 Litigation Support and Expert Testimony (SP) 3 credits

This course demonstrates the numerous opportunities available for the appraiser to offer appraisal services in litigation matters involving real estate taxes, contamination, condemnation, fraud, divorces, construction defects, etc. Coverage includes litigation opportunities, role of the ap-

praiser, role of the attorney, compliance with USPAP, pretrial conference, witness demeanor and effective communication, direct examination, cross examination, and depositions.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: APPR 101

Lab fee: \$2.00

APPR 235 Residential Market Analysis/Highest & Best Use (S) 2 credits

Course provides a look at the relationship between market analysis and highest and best use. Students will examine the market by reviewing census data, government reports, demographics, rent studies and other real estate studies to learn how to measure demand. Students will also explore the four tests for highest and best use and the proper support for each conclusion.

Lecture: 2 hours – Lab 0 hours

Prerequisite: APPR 101 and APPR 102

Lab Fee: \$3

APPR 240 - Residential Site Valuation and Cost Approach (AU) 2 credits

Course will focus on the valuation of vacant land parcels and the development of the cost approach. The valuation of land is explored by looking at all of the different techniques used in the market. This course will explore the methods used to establish replacement cost and reproduction costs of structures as well as a discussion of depreciation and the methods used to measure depreciation in the marketplace.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: APPR 101 and APPR 102

Lab Fee: \$3

APPR 250 - Residential Sales Comparison & Income Approaches (WI) 3 credits

Course provides the student with the techniques necessary for completing the sales comparison and income capitalization approaches of the valuation process. The course explores paired sales analysis as a tool to support adjustments and the selection of appropriate capitalization rates for use in the income approach.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: APPR 101 and APPR 102

Lab Fee: \$3

APPR 260 - Advanced Residential Applications (SP) 2 credits

This course will apply advanced residential methodologies involving a complex residential case study appraisal assignment. This case study will inter-relate site valuation, the cost approach, the sales comparison approach and the income approach to value. Students will correlate to a final conclusion of value of their own choosing and learn to support that conclusion.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: APPR 101 and APPR 102

Lab Fee: \$3

APPR 284 USPAP and Fair Housing 2 credits

Capstone course for the Ohio appraisal certification. Course users will learn to apply the standards of the industry to the instruments of appraisal process. This course covers the requirements for ethical and competent appraiser performance as set out in materials developed and issued by the Appraisal Foundation. Coverage includes history of the Appraisal Foundation, functions of Appraisal Standards Board and the Appraisal Qualifications Board, rules of USPAP, and standards of USPAP. This course will also cover the Federal, State and Municipal Fair Housing requirements for appraisers.

Lecture: 2 hours

Prerequisites: None

Lab fee: \$2.00

APPR 290 Appraisal Practicum I (A, W, SP, SU) 1 credit

Prerequisite: APPR 101 and 102

APPR 291 Appraisal Seminar I (A, W, SP, SU)**1 credit**

Prerequisite: APPR 101, 102

APPR 290 (concurrent)

Arabic (ARAB)**ARAB 101 Elementary Arabic I (On Demand)****5 credits**

Introduction to the fundamentals of the Arabic language with practice in listening, reading, speaking, and writing. Includes studies in Arabic culture. Meets elective requirements in the Associate of Arts and Associate of Science Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

ARAB 102 Elementary Arabic II (On Demand)**5 credits**

Continuation of ARAB 101 with further development of listening, reading, speaking, and writing skills and further study of Arabic culture. Meets elective requirements in the Associate of Arts and Associate of Science Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ARAB 101 with a grade of “C” or better

Lab fee: \$6.00

Architecture (ARCH)**ARCH 100 Introduction to the History of Architecture (A, W, SP)****5 credits**

A study of the fundamental elements of architecture, its development, and its meaning to various cultures throughout western history. Architecture is viewed from the perspectives of form, function, interior and exterior space, technological development, and landscape. Meets elective requirements in the Associate of Arts and Associate of Science Degree programs.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 101

Lab fee: \$9.00

ARCH 110 Construction Drafting–Manual I (A,W SP,SU) 2 credits

This course presents basic concepts and fundamentals of drafting especially for the building construction industry and covers the use of drawing instruments, lettering practices, basic line work, dimension procedures and an introduction to orthographic projection.

Lecture: 1 hours – Lab: 3 hours

Lab fee: \$15.00

ARCH 111 Architectural Drafting–Manual II (A, W, SP) 4 credits

This course is intended to develop the skills of drafting especially for building construction and covers the use of lettering practices, line quality and weights, dimension procedures, orthographic projection, and the drawing of plans, sections and elevations.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: ARCH 110

Lab fee: \$15.00

ARCH 112 Construction Drafting–CAD I (A, W, SP, SU) 2 credits

This course is an introduction to the basic features of AutoCAD. Emphasis is placed on the basic display, drawing, editing, dimensioning, and text commands required for the elementary use of AutoCAD. Lectures, in-class demonstrations, and hands on work sessions are employed as teaching tools

during the course. The course uses the current release of AutoCAD.

Lecture: 1 hour – Lab: 3 hours

Prerequisite: ARCH 110 or permission of instructor

Lab fee: \$15.00

ARCH 113 Architectural Drafting–CAD II (A,W,SP,SU) 2 credits

This course introduces students to the intermediate features of AutoCAD and builds upon the basics learned in ARCH 112. Emphasis is placed on advanced dimensioning features, hatching, attributes, external references and paper/model space. Several small projects will be created utilizing these features. Lectures, in-class demonstrations, and hands-on work sessions are employed as teaching tools during the course. The course uses current release of AutoCAD.

Lecture: 1 hour – Lab: 3 hours

Prerequisite: ARCH 112

Lab fee: \$15.00

ARCH 114 Architectural Drafting–CAD III (A,W,SP, SU) 2 credits

This course introduces students to the advanced features of AutoCAD and builds upon ARCH 113. Emphasis is placed the use of additional two-dimensional drafting commands. The student will learn the tools necessary to create a set of working drawings for a residential project. Lectures, in-class demonstrations, and hands-on work sessions are employed as teaching tools during the course. The course uses current release of AutoCAD.

Lecture: 1 hour – Lab: 3 hours

Prerequisite: ARCH 113

Lab fee: \$15.00

ARCH 115 MicroStation CAD Drafting I (W)**3 credits**

This course is to provide training in the use of basic display, drawing, manipulation, dimensioning, text, cell, reference files and plotting commands required to the elementary use of Bentley MicroStation. After mastering system basics, students will be given individual projects.

Lecture: 1 hour – Lab: 5 hours

Prerequisite: ARCH110 or permission of instructor

Lab fee: \$15.00

ARCH 130 Introduction to Interior Design (On Demand) 4 credits

An introduction to the design process, focusing on space planning, through the use of project assignments in a design studio. Emphasis is on problem solving and the process of design, exploring the tools and resources available, and presentation. Several projects, small in scope, will be employed to give the student exposure to a wide variety of typical interior design problems. Lecture, discussion, and studio critiques will be employed as teaching methods during the course.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: ARCH 113

Lab fee: \$12.00

ARCH 155 Residential Construction/Wood Structures (A,SP)**3 credits**

This course outlines the various phases of residential construction for site analysis to finish material installations, including conventional wood framing, floor and roof truss framing, heavy timber/post and beam construction, and various plywood panel construction techniques. Additional topics discussed include the design and use of floor joist span charts, simple beam and footing design, as well as roof and foundation design. This course concludes with the choice of building a structural/framing model or preparing a PowerPoint presentation of a residential construction task.

Lecture: 1 hour – Lab: 5 hours

Prerequisite: CIVL 120

Lab fee: \$12.00

ARCH 161 Presentation Drawings (A, SP)**3 credits**

A manual drafting course that is designed to serve as a basis for presentation drawings by hand or using the computer. Problems are designed to strengthen the student’s understanding of 3D drawing principles, and to use those principles in order to solve drawing and design issues.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: ARCH 111
Lab fee: \$15.00

ARCH 214 Electricity (W, SU) 2 credits

This course studies the electrical code, electrical systems, standards, conventional symbols, nomenclature, layouts and fixture and equipment schedules. Coordination of electrical work with the elements of the building is emphasized.

Lecture: 1 hour – Lab: 2 hours
Prerequisite: CMGT 121
Lab fee: \$6.00

ARCH 215 Lighting (W, SU) 2 credits

This course deals with the fundamentals of lighting within buildings. The appropriate quantity of lighting is calculated and the appropriate selection and placement of lighting within a space is studied.

Lecture: 1 hour – Lab: 3 hours
Prerequisite: CMGT121
Lab fee: \$6.00

ARCH 221 Design Studio I (W) 3 credits

This course is built around the design process and design logic, and will also include an emphasis on working either alone or as part of a team. The design theme may include emphasis on sustainable architecture as the primary design goal. When sustainable architecture is the framework of the course, lectures and research assignments will include lessons on solar energy, conservation practices, building materials, and other aspects of sustainability.

Lecture: 2 hours – Lab: 6 hours
Prerequisite: ARCH111 and ARCH114, or permission of instructor
Lab fee: \$20.00

ARCH 223 Design Studio II (SP) 3 credits

This course is built on the foundations laid by ARCH221 and includes discussions of design principles. Students will develop a work on various design projects including a small and complex architectural project.

Lecture: 1 hours – Lab: 6 hours
Prerequisite: ARCH221 or permission of instructor
Lab fee: \$20.00

ARCH 232 Building Construction Standards (A, SP) 3 credits

This course focuses primarily on building and zoning codes. Emphasis is placed on the OBBC (Ohio Basic Building Code) and the Columbus, Ohio zoning code. Other areas of study include the influence of professional associations, manufacturers, and testing laboratories in design and construction documents; CSI specifications, their organization, content and relationship to other contract documents; and professional practice in architecture.

Lecture: 1 hour – Lab: 5 hours
Prerequisite: CMGT 121
Lab fee: \$12.00

ARCH 237 Structures–Steel, Concrete and Masonry (W, SU) 4 credits

This course presents basic conceptual and practical structural design concepts. Steel, concrete and masonry structures are studied and evaluated mathematically. The student will learn how to evaluate and design beams and columns in both steel and concrete. Other topics include bearing plate/base plate design, bolted and welded connections, concrete and masonry wall design. Drafting projects require the use of CAD and will focus on structural elements.

Lecture: 2 hours – Lab: 6 hours
Prerequisite: MATH 148, ARCH 114 and MECH242
Lab fee: \$12.00

ARCH 240 3D Modeling and Rendering–AutoCAD (On Demand) 3 credits

An introduction to presentation drawing techniques using computer

applications. The course will focus on three-dimensional modeling, rendering and other applications useful to the profession.

Lecture: 1 hours – Lab: 5 hours
Prerequisite: ARCH 113 and ARCH 161
Lab fee: \$12.00

ARCH 242 3D Visualization–form•Z I (A) 4 credits

This course is an introduction to three-dimensional computer modeling using formZ. Basic modeling functions, lighting, material applications and rendering will be studied. This course focuses on techniques and methods applicable to architects, interior designers and other building related professions.

Lecture: 1 hours – Lab: 7 hours
Prerequisite: Associate degree or higher or 50 completed hours within Architecture program or permission of instructor
Lab fee: \$15.00

ARCH 243 3D Visualization – form•Z II (W) 4 credits

This course builds upon the fundamentals learned in ARCH242 and focuses on more advanced techniques. Emphasis is placed on advanced modeling techniques, the mapping of realistic finishes, and the replication of real-world interior and exterior lighting conditions. The fundamentals of architectural animation are also studied.

Lecture: 1 hours – Lab: 7 hours
Prerequisite: ARCH 242
Lab fee: \$15.00

ARCH 244 3D Rendering and Lighting – form•Z (On Demand) 3 credits

This course presents the fundamentals of the application of materials and lighting to 3D architectural models. Emphasis is placed on mapping realistic finishes as well as replicating real-world interior and exterior lighting conditions.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: ARCH 243
Lab fee: \$15.00

ARCH 245 Computer Animation – form•Z (On Demand) 3 credits

This course presents the fundamentals of architectural animation through the use of form•Z. Emphasis is placed upon optimizing the model for animation and establishing the camera path.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: ARCH 244
Lab fee: \$15.00

ARCH 246 3D Visualization – 3ds Max I (SP) 4 credits

This course is an introduction to three-dimensional computer modeling using formZ. Basic modeling functions, lighting, material applications and rendering will be studied. This course focuses on techniques and methods applicable to architects, interior designers and other building related professions. Lecture: 1 hours – Lab: 7 hours

Prerequisite: Associate degree or higher or 50 completed hours within Architecture program or permission of instructor
Lab fee: \$15.00

ARCH 247 3D Visualization – 3ds Max II (SU) 4 credits

This course builds upon the fundamentals learned in ARCH246 and will focus on more advanced techniques. Emphasis is placed on advanced modeling techniques, the mapping of realistic finishes, and the replication of real-world interior and exterior lighting conditions. The fundamentals of architectural animation are also studied.

Lecture: 1 hours – Lab: 7 hours
Prerequisite: ARCH 246
Lab fee: \$15.00

ARCH 248 3D Rendering and Lighting – Autodesk Viz4 (On Demand) 3 credits

This course presents the fundamentals of the application of materials

and lighting to 3D architectural models. Emphasis is placed on mapping realistic finishes as well as replicating real-world interior and exterior lighting conditions.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ARCH 247

Lab fee: \$15.00

ARCH 249 Computer Animation – Autodesk Viz4 (On Demand)

3 credits

This course presents the fundamentals of architectural animation through the use of Autodesk Viz4. Emphasis is placed upon optimizing the model for animation, and establishing the camera path.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ARCH 248

Lab fee: \$15.00

ARCH 250 Building Enclosure Materials (A,SP)

3 credits

This course is designed to expand on the knowledge gained in CIVL 120, with the study of how such materials and others are combined to form the building shell. The course focuses on the separation between exterior and interior environments. Topics covered include roofing, glass, windows and doors, walls, foundations, and interior finishes, vertical transportation and acoustics.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIVL 120

Lab fee: \$12.00

ARCH 252 Post Production (W, SU)

3 credits

This course presents the fundamentals of post-editing computer renderings. Emphasis is placed upon adding people and trees, correcting the lighting levels and applying different filter effects.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ARCH 242 or ARCH246

Lab fee: \$15.00

ARCH 266 Working Drawings (A, SP)

5 credits

This course both introduces the student to the practice of working drawings and integrates knowledge based on all prior architectural courses. Part of the course focuses on individual tasks, such as the generation of details, schedules, and plans, while another part of the course will focus on work generated in a group setting, simulating a team effort common to a modern architectural office.

Lecture: 2 hour – Lab: 6 hours

Prerequisite: ARCH 114, ARCH 232 and ARCH 250

Lab fee: \$20.00

ARCH 270 Professional Practice and Management (A, SP)

3 credits

Students learn about planning projects, defining project scope and translating physical needs into building area, developing alternative solutions, preparing schedules and estimates, coordinating work efforts, and other practical factors. The student must consider physical constraints, code implications, costs, bidding, construction sequencing and practices, design goals, and working with consultants.

Lecture: 1 hour – Lab: 5 hours

Prerequisite: ARCH 250 or permission of instructor

Lab fee: \$10.00

ARCH 282 Sustainable Design Strategies (SP)

3 credits

ARCH 282 will introduce the student to the issues and concepts related to sustainable design. The impact of the building's site, energy efficiency, the use of renewable forms of energy, including solar energy, will be studied as it relates to building design. Projects will be assigned on a regular basis and will be adaptable to the varied backgrounds of students. Lecture: 3 hours
Prerequisite: ENVR 282 or permission of instructor
Lab Fee: \$10.00

ARCH 283 Sustainable Energy Performance (SU)

3 credits

Students become familiar with the concept of thermaltransfer, the energy

characteristics of various building energy systems and components, and learn how to compare the projected performance characteristics of one building model against another. The object is to learn an approach that enables well informed decisions to be made that will affect sustainability.

Lecture: 3 hours

Prerequisite: ENVR 282 or permission of instructor

Lab fee: \$10.00

ARCH 291 Field Experience (SU)

3 credits

Off-campus work experience in architecture, consulting engineering, or construction-related paid employment that augments formal education received in the technology, with actual work conditions and job experience. "N" credit will not be allowed for this course.

Lecture: 0 hours – Lab: 36 hours

Lab fee: \$0.00

ARCH 299 Special Topics in Architecture (on demand)

1-5 credits

Detailed examination of selected topics in Architecture.

Lecture and Lab hours vary dependent upon topic.

Prerequisite: varies based upon topic.

Lab fee: \$10.00

Facility Management (FAC)

Also see Architecture (ARCH)

FAC 111 Introduction to Facility Management (On Demand)

3 credits

A course designed to familiarize the student with the fundamental areas of knowledge comprising facility management, including ethical and legal responsibilities, the relationship of the facilities unit with other organizational units, and the history, concepts, standards and responsibilities of the profession.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$5.00.

FAC 150 Operations & Maintenance (On Demand)

3 credits

A course designed to convey to the student an understanding of the importance, procedures, policies, and practices required to oversee acquisition, installation, operation, maintenance, and disposition of building systems, furniture, equipment, grounds, and other elements of a facility.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: FAC 111

Lab fee: \$10.00

FAC 240 Voice and Data Systems (On Demand)

3 credits

A study of the techniques, theory, and devices used for communication in computer systems, network, and telecommunications, with an emphasis on facility needs and problems arising with communications and management of the systems.

Lecture: 3 hours – Lab: 0 hours

FAC 250 Computers in Facility Management (On Demand)

2 credits

A study of the computer programs and techniques in current use for facility management, including those used in communication, engineering and management.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: CIT 101

Lab fee: \$15.00

FAC 260 Problems in Facility Management (On Demand)

4 credits

A comprehensive capstone course for the facility management student, blending academic theory with practical skills. Problem solving and

teamwork in reaching solutions to real problems is emphasized. Students will present their reports and findings to an academic panel and/or real clients.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: FAC 150

Lab fee: \$10.00

Art (ART)

ART 101 History of Western Art (A, W, SP, SU) 5 credits

A survey of artistic expression in the Western World from the earliest times to the present including the types of media used and their limitations, the role of patronage in artistic development, the relationship of art and the artist to developments in society, and a consideration of the attributes of “great” art in any time or age. Meets elective requirements in the Associate of Arts and Associate of Science Degree programs and distributive transfer requirements in Humanities and the Arts.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$2.00

ART 121 Beginning Drawing (A, W, SP, SU) 5 credits

An introduction to the basic techniques of freehand drawing. Emphasis is on media, concepts, drawing from observation, and development of technique. Meets elective requirements in the Associate of Arts and Associate of Science Degree programs and distributive transfer requirements in the Arts.

Lecture: 0 hours – Lab: 10 hours

Lab fee: \$2.00

ART 122 Two-Dimensional Design (A, W, SP, SU) 5 credits

An introduction to the basic concepts of 2-dimensional design: line, shape, space, hue, value and texture. Use of various media in a variety of problem-solving projects leading toward an awareness of the principles of visual organization.

Lecture: 0 hours – Lab: 10 hours

Lab fee: \$2.00

ART 123 Beginning Painting (On Demand) 5 credits

An introduction to studio painting fundamentals utilizing varied subject matter and media.

Lecture: 0 hours – Lab: 10 hours

Lab fee: \$2.00

ART 131 Three-Dimensional Design (on demand) 5 credits

Design II is aimed at developing the student’s basic understanding of three-dimensional visual communication through the exploration of three-dimensional principles. Students learn through the process of solving visual art problems. Solutions to these problems are achieved through the fabricating of three-dimensional art objects. Various techniques and media are also systematically addressed that are common to this area of study.

Lecture: 0 hours – Lab: 10 hours

Prerequisite: ART 122 or permission of instructor.

Lab fee: \$2.00

ART 230 Color Composition (A, SP) 5 credits

This course examines the theory and artistic application of basic color principles through student projects and lecture. Such topics as color mixing, interaction, and organization are presented.

Lecture: 0 hours – Lab: 10 hours

Prerequisite: ART 122 or permission of instructor

Lab fee: \$2.00

ART 242 World Cinema (On Demand) 5 credits

A course exploring the history of world cinema through analysis of the con-

tent and structure of selected major historic examples in the genre from the beginnings of film in the late 19th century to the present. Special attention will be given to the work of important filmmakers from around the world and to the social and philosophical context in which they worked.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$2.00

Time Arts Courses

ART 215 Time Arts Foundation (On Demand) 4 credits

An introductory course exploring the visual and audio tools necessary for the production of time art works. The course will also introduce students to thematic, motivic, concrete, symbolic and other structural elements used in such works. Students will create original works utilizing digital camera, tape recorder, video camera, and digital audio composition.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: Hum 111, 112, 113, 151 or 152, or permission of instructor

Lab fee: \$4.00

ART 216 The Temporal Image (on demand) 4 credits

This course will simultaneously explore the history of independent filmmaking (beginning with Dali and Duchamp and ending with the works of Paik and Viola), as well as the techniques for independent film/video production. Building on the concepts and techniques learned in Art 215, students will create their own explorations of images in time.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: Hum 245 and Art 215

Lab fee: \$4.00

HUM 245 Art and Music Since 1945 (see Hum 245)

MUS 217 Electronic Sound (see MUS 217)

ART 290 Capstone Experience in Art (On Demand) 3 credits

A capstone course focusing on Art. Students will work on developing techniques and methodologies in the field of art. Students will apply those techniques to a project of their own design, complete a personal portfolio covering their studies at Columbus State, and participate in summative testing of their academic skills.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Open only to AA and AS students preparing to graduate within 2 academic quarters.

Lab fee: \$2.00

ART 299 Special Topics in Art (On Demand) 1 to 5 credits

Detailed examination of selected topics of art.

Lecture: variable hours – Lab: hours

Prerequisite: Permission of Instructor.

Lab fee: \$2.00

Arts and Sciences (ASC)

ASC 150 Individual Learning and Motivation: Strategies for Success in College (A, W, SP, SU) 3 credits

This course examines theory and practice about learning strategies, motivation, and thinking, focusing on the application of four major learning strategies to success in college. Course is taught in a computer environment to engage students in active learning. This course has been proven to increase grade point averages and retention rate of college students. Open to all students. May be used as a substitute for ASC 190

Lecture: 1 hour. Computer Lab: 4 hours.
Prerequisite: Admission to ENGL 101
Lab Fee: \$4.00

ASC 190—Freshman Seminar (A, W, SP, SU) 2 credits

The Freshman Seminar is designed to familiarize first time Arts and Science students at Columbus State with the academic environment. Students will use various support systems, set personal academic goals, and map their course of study at Columbus State to meet these goals. The course is designed to enhance critical reading and thinking skills through selected reading of primary materials. Optional for students having completed ESL 100; required for all Associate of Arts and Associate of Science degree seeking students. Students are advised to take this course in conjunction with ENGL 101 or ENGL 111.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AS or AA major; ENGL 100
Lab fee \$4.00

ASC 290 Capstone Experience in Arts and Science (On Demand) 3 credits

Lecture: 2 hours – Lab: 2 hours
Prerequisite: 75 hours completed toward the degree
Lab Fee: \$10.00

ASC 299 Special Topics in Arts and Sciences (On Demand) 1-5 credits

Special Topics in Arts and Sciences designed to meet specific needs.
Lecture hours vary – Lab hours vary
Prerequisites: Vary

Astronomy (ASTR)

ASTR 161 (On Demand) 5 credit hours

An introduction to astronomy focusing on the solar system. Topics: historical astronomy, observational techniques, light, optics and telescopes, gravitation, terrestrial planets, Jovian planets, comets, and asteroids. Related simulations and demonstrations. This class may require additional time outside of the scheduled class hours.

Lecture: 5 hours
Prerequisite: Math 104.
Lab Fee: \$ 6.00

Automotive Technology (AUTO)

AUTO 061 Basic Automotive Systems & Theories of Operation (A,W,SP,SU) 4 credits

This course covers the basic systems of an automobile and their theory of operation. Includes the physical, hydraulic, and electrical theoretical basics, as applied to cars and light trucks. This course and AUTO 062 are prerequisites for all other automotive courses. Credit for this course can be obtained by satisfactory completion of the course, documented previous training and/or experience, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 3 hours – Lab: 3 hours
Concurrent: It is recommended that this course be taken the same quarter as AUTO 062.
Lab fee: \$15.00

AUTO 062 Auto Shop Orientation & Service (A, W, SP, SU)

4 credits

This course covers the operation of an automotive shop. Includes use of hand and power tools and basic maintenance operations on cars and light trucks. This course and AUTO 061 are prerequisites for all other automotive courses. Credit for this course can be obtained by satisfactory completion of the course, documented previous training and/or experience, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 3 hours – Lab: 3 hours
Prerequisite: AUTO 061

Concurrent: It is recommended that this course be taken the same quarter as AUTO 061.
Lab fee: \$15.00

AUTO 101 Autocare (On Demand) 3 credits

This course is designed for the non-automotive student who is interested in obtaining a familiarity with the fundamentals of automotive systems and preventative maintenance. Also included is information on choosing a repair shop, tips and techniques for dealing with minor breakdowns, and vehicle purchasing strategies.

Lecture: 2 hours – Lab: 2 hours
Lab fee: \$20.00

AUTO 110 Engine Operation & Overhaul (A, SU) 4 credits

A basic course in the theory of operation and automotive engines. All engine mechanical systems are explored during teardown and assembly of a current automotive engine. Common in-car repairs are covered. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO 061 and AUTO 062

Concurrent: It is recommended that this course be taken the same quarter as AUTO 115.
Lab fee: \$20.00

AUTO 115 Engine Diagnosis & In-Car Repair (A, SU) 3 credits

An advanced engine course including minor cylinder head and valve machining, component service, and engine removal and installation. Prepares student to achieve national ASE certification in engine repair.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 110

Concurrent: It is recommended that this course be taken the same quarter as AUTO 110.
Lab fee: \$20.00

AUTO 120 Automatic Transmissions Operation & Overhaul (W, SP) 4 credits

A basic course in automatic transmission theory of operation. Hydraulic and electrical systems are emphasized during a complete teardown and assembly. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO 061 and AUTO 062

Concurrent: It is recommended that this course be taken the same quarter as AUTO 125.
Lab fee: \$15.00

AUTO 125 Automatic Transmissions Diagnosis & In-Car Repair (W, SP) 3 credits

An advanced course in automatic transmission and transaxle service and diagnostics. Emphasis on field diagnostics and repairs. Prepares student to achieve national ASE certification in automatic transmissions.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 120

Concurrent: It is recommended that this course be taken the same quarter

as AUTO 120.
Lab fee: \$15.00

AUTO 130 Manual Transmissions/Driveline Operation & Overhaul (A, SU) 4 credits

This course provides a working knowledge of manual transmissions, transaxles, and differentials. Repair and diagnostics are covered during complete teardown and assembly. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO 061 and AUTO 062
Concurrent: It is recommended that this course be taken the same quarter as AUTO 135.
Lab fee: \$15.00

AUTO 135 Manual Transmissions Diagnosis & In-Car Repair (A, SU) 3 credits

An advanced course in clutch, manual transmission, transaxle, and differential diagnostics. Includes clutch and transmission removal and installation. Prepares student to achieve national ASE certification in manual transmissions.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 130
Concurrent: It is recommended that this course be taken the same quarter as AUTO 130.
Lab fee: \$15.00

AUTO 140 Suspension and Steering System Theory & Operation (SP, SU) 4 credits

This course provides a working knowledge of the diagnosis and repair of wheels, tires, suspension systems, steering systems, and wheel alignment diagnosis and adjustment. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$15.00

AUTO 145 Suspension and Steering Diagnosis & Repair (A,W) 3 credits

An advanced course covering detailed diagnostics and service of suspension components. Includes instruction on both two-wheel and four-wheel alignment. Prepares student to achieve national ASE certification in suspension and steering.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 140
Lab fee: \$15.00

AUTO 150 Brake Systems Theory & Operation (W,SP) 4 credits

This course provides a working knowledge of the diagnosis and repair of the hydraulic system, drum brake systems, disc brake systems, power assist units, and associated systems including wheel bearings, parking brakes and related electrical circuits. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$20.00

AUTO 155 Brake Systems Diagnosis & Repair (SP) 3 credits

An advanced course covering detailed diagnostics and repair of automotive brake systems including anti-lock systems. Prepares student to achieve national ASE certification in brake systems.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 150
Lab fee: \$15.00

AUTO 160 Electrical Systems Theory & Operation (W, SU) 4 credits

This course provides a working knowledge of the diagnosis and repair of general electrical systems: the battery, starting, charging, and lighting systems. Also included are gauges, warning devices, wiper systems, and other electrical accessories. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 3 hours – Lab: 3 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$15.00

AUTO 165 Electrical/Electronic Diagnosis & Repair (A, SP) 3 credits

An advanced course designed to provide students with a knowledge of electronic components, circuits and diagrams, and testing and service of automotive computer systems. Prepares student to achieve national ASE certification in electrical systems.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 160
Lab fee: \$15.00

AUTO 170 Heating and Air Conditioning Systems Theory & Operation (SP) 4 credits

This course provides a working knowledge of the diagnosis and repair of air conditioning systems, refrigeration systems, heating and engine cooling systems, and control units. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$15.00

AUTO 175 Heating and Air Conditioning Diagnosis & Repair (SP, SU) 3 credits

An advanced course designed to provide the knowledge necessary to diagnosis and repair automotive air conditioning systems, including the diagnosis and repair of automatic temperature controls and related electronic systems. Prepares student to achieve national ASE certification in heating and air conditioning systems.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 170
Lab fee: \$20.00

AUTO 180 Engine Performance Theory & Operation (A, SP) 4 credits

This course provides the opportunity to gain a working knowledge of engine performance diagnostics. Includes diagnosis and repair of the ignition system, fuel and exhaust systems, emission control systems, and an introduction to engine electrical and computer control systems. Credit for this course can be obtained by satisfactory completion of the course, ASE certification in this area, or by satisfactory results of a proficiency exam administered by the department. It is strongly recommended that students complete AUTO 110 and AUTO160 prior to registering for this course.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: AUTO160
Lab fee: \$15.00

AUTO 181 Fundamentals of Alternative Fuel Systems (On Demand) 3 credits

This course provides a working knowledge of the predominate alternate fuel systems currently in use in automotive applications. These include CNG, LNG, propane, ethanol, methanol, electric, oxygenated gasoline, and gasohol. The unique characteristics of each fuel along with the systems

used to adapt automobiles to its use is explored along with the federal legislation that is mandating and controlling this technology.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 180

Lab fee: \$20.00

AUTO 185 Computerized Engine Performance (W, SU) 3 credits

The course is designed to provide students with a working knowledge in the area of advanced engine diagnostics. Diagnosis and repair of fuel injection and computerized engine control systems are included. Prepares student to achieve national ASE certification in engine performance.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 180

Lab fee: \$15.00

AUTO 186 Advanced Alternative Fuel Systems (On Demand)

3 credits

An advanced course designed to provide students with background knowledge and experience on current alternate fuel conversion systems and proper installation procedures. Symptom analysis, diagnosis, and repair of alternate fuel related engine performance problems are covered. Prepares student to achieve national ASE certification in alternate fuels.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 181 and 185

Lab fee: \$20.00

AUTO 190 Automotive Business Management (On Demand) 3 credits

An introduction to automotive management principles. Topics covered include systems approach to management, management styles, financial measures, MBO and quality, time management, customer and employee relations, marketing and the legal environments.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 061 and AUTO 062

Lab fee: \$10.00

AUTO 191 Service Advising (On Demand) 3 credits

Course covers, in depth, the primary responsibilities of a service advisor, including writing a proper repair order, scheduling, selling maintenance and customer relations. Estimating, repair order tracking and time management skills are also presented.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 190

Lab fee: \$10.00

AUTO 192 Automotive Service Management (On Demand) 3 credits

This course covers the variety of duties of the service manager. Principles presented in AUTO 190 are further developed along with practical implementation strategies. Facilities and equipment planning and management along with financial management and analysis are covered.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 190

Lab fee: \$10.00

AUTO 193 Automotive Service Merchandising (On Demand)

3 credits

Principles of marketing, merchandising, and advertising and their application in the automotive repair industry will be covered in this course. Upon completion of this course, the student will be able to demonstrate the ability to develop specific merchandising and advertising items and to develop a departmental marketing plan.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 190

Lab fee: \$10.00

AUTO 195 Auto Parts–Sales (On Demand) 2 credits

The duties and responsibilities of a parts department counter person are covered in this course. The use of catalogs and locator systems, as well as outside sales, are included.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: AUTO 190

Lab fee: \$10.00

AUTO 196 Auto Parts–Inventory Control (On Demand) 2 credits

This course covers the various inventory control systems that are commonly used in automotive parts departments and stores. Determining inventory levels is an integral part of this course.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: AUTO 190

Lab fee: \$10.00

AUTO 197 Auto Parts–Management (On Demand) 3 credits

This course covers the various management duties of a parts department manager. Pricing, inventory merchandising, forecasting, and purchasing are included.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO 190

Lab fee: \$10.00

AUTO 210 Current Trends in Engine Repair (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in engine design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: AUTO 115

Lab fee: \$15.00

AUTO 220 Current Trends in Automatic Transmissions (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in automatic transmission design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: AUTO 125

Lab fee: \$15.00

AUTO 230 Current Trends in Manual Transmissions (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in manual transmission design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: AUTO 135

Lab fee: \$15.00

AUTO 240 Current Trends in Suspension Steering (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in steering and suspension system design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: AUTO 145

Lab fee: \$15.00

AUTO 245 Steering, Suspension and Brakes–Diagnosis and Evaluation (On Demand) 3 credits

This course prepares students to service and repair Ford steering, suspension, and brake systems and pass the written and hands-on evaluations required to earn Ford STST General Brakes Certification and Base Steering and Suspension Certification.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: AUTO140 and AUTO150

AUTO 250 Current Trends in Brake Systems (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in brake system design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours
Prerequisite: AUTO 155
Lab fee: \$15.00

AUTO 260 Current Trends in Electrical Systems (On Demand)
2 credits

The content of this course reflects recent technological advances and changes in electrical system design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours
Prerequisite: AUTO 165
Lab fee: \$15.00

AUTO 265 Electrical Diagnosis and Evaluation (On Demand) 3 credits

This course prepares students to service and repair Ford electrical systems and pass the written and hands-on evaluations for the Ford STST Basic Electrical Certification.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO160

AUTO 270 Current Trends in A/C Systems (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in heating/air conditioning system design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours
Prerequisite: AUTO 175
Lab fee: \$15.00

AUTO 280 Current Trends in Engine Systems (On Demand) 2 credits

The content of this course reflects recent technological advances and changes in engine control system design and repair made by the automobile industry during the current model year.

Lecture: 1 hours – Lab: 2 hours
Prerequisite: AUTO 185
Lab fee: \$15.00

AUTO 297 Special Topics in Automotive Technology (On Demand)
1 credit

Advanced level course elective. This course will address current issues in the automotive industry.

Lecture: 1 hours – Lab: 0 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$15.00

AUTO 298 Special Topics in Automotive Technology (On Demand)
2 credits

Advanced level course elective. This course will address current issues in the automotive industry.

Lecture: 1 hours – Lab: 2 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$15.00

AUTO 299 Special Topics in Automotive Technology (On Demand)
3 credits

Advanced level course elective. This course will address current issues in the automotive industry.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: AUTO 061 and AUTO 062
Lab fee: \$15.00

AUTO 300 Shop Experience (SP)
4 credits

This course is taken during a student's final quarter. It includes a final assessment of skills and knowledge. Skills are measured in a shop condition with the students performing diagnostics and repairs. A review of the eight ASE areas is also included.

Lecture: 1 hours – Lab: 8 hours
Prerequisite: Permission of instructor
Lab fee: \$25.00

Aviation Maintenance Technology (AMT)

AMT 101 Introduction to Aviation (A, SP)
4 credits

The unique concept of an intricate machine that operates primarily in an environment where an essential system or catastrophic failure can be met with grave results makes aircraft maintenance different from any other type of maintenance. As in all maintenance fields, before the first wrench is turned, the technician needs to know how the particular machine is supposed to work. This course starts with the basic knowledge of the science and physics involved with the operation and environment in which the machine works. Students will be exposed to an introduction of aerodynamics for the aviation maintenance technician. Focus will be on principles of simple machines, sound, fluid dynamics, heat, and pressure as they pertain to fixed wing aircraft, rotary wing aircraft, aircraft powerplants, and propellers. Students will also learn the principles of primary and secondary flight controls and aircraft nomenclature.

Lecture: 3 hours - Lab: 2 hours
Prerequisite: Placement into MATH 102 and ENGL 101
Lab fee: \$12.00

AMT 110 AMT Regulations, Privileges, & Documentation (A, SP)
4 credits

A critical part of an aircraft maintenance technician's job is to make sure that all the work performed on an aircraft is in accordance with the manufacturer's technical data and the applicable government regulations. In order to do this, the technician needs extensive reference skills to know where to acquire this information and background in the regulations pertaining to aircraft maintenance. This course is an in-depth study of Title 14 of the Code of Federal Regulations, Aeronautics and Space, as they pertain to the Aviation Maintenance Technician. Focus will be on history of the FAR's, certification of mechanics, certification of aircraft, engines and propellers. In addition, students study the regulatory maintenance requirements of aircraft and regulatory requirements of aircraft records. The format of FAA and manufacturer's publications is studied with emphasis on aircraft technical publication research.

Lecture: 3 hour – Lab: 2 hours
Prerequisite: Placement into MATH 102 and ENGL 101
Lab fee: \$12.00

AMT 115 Aircraft DC Electricity (A, SP)
5 credits

With the sophisticated aircraft that are being manufactured today, an understanding of basic DC concepts is essential to the success of the modern aircraft maintenance technician. In this course, students will develop a fundamental understanding of basic DC electrical circuits with an emphasis on airborne installations. Electrical theory and practical application will be accomplished and proven through extensive experimentation and practice. Aircraft maintenance practices as they relate to batteries, power calculations, and the relationship of voltage, current, and resistance will be examined, as well as precision measurement of these values on operational circuits.

Lecture: 3 hours – Lab: 5 hours
Prerequisite: Placement into MATH 102 and ENGL 101
Lab fee: \$20.00

AMT 130 Aircraft Ground Handling & Safety (W, SU)
2 credits

Aircraft Maintenance cannot be safely performed unless there is a complete understanding of the hazards and handling procedures involved with aircraft in a hangar, shop, or outdoor ramp environment. In this class, students will study and engage in practices involving aircraft in these situations. Emphasis will be placed on accomplishment of tasks while preserving a safe environment for personnel as well as the equipment. Students will become proficient while performing various aircraft maintenance responsibilities that involve shop safety, tie-down procedures, aircraft jacking and hoisting, and aircraft cleaning.

Lecture: 1 hour – Lab: 2 hours
Prerequisite: Placement into MATH 102 and ENGL 101
Lab fee: \$16.00

AMT 140 Aircraft Tools, Hardware & Materials (W, SU) 5 credits

As in any technical field, aircraft maintenance requires basic practical skills to create a foundation to build on. With its placement at an early point in the program, this course is where students will begin to build these basic skills. Focus will be placed on common hand tools usage and safety, making precision measurements and proper use of torque wrenches. Identification of aircraft hardware and other materials used in the aircraft industry will also be presented. Students will be instructed in the methods of safety wiring hardware. In addition, welding techniques, inspection of welds and heat-treatment of metals will be examined and applied.

Lecture: 3 hours – Lab: 6 hours

Prerequisite: Placement into MATH 102 and ENGL 101

Lab fee: \$26.00

AMT 145 Aircraft AC Electricity (W, SU) 5 credits

Many modern aircraft avionic and passenger comfort systems need to be supplied with AC power. In this class, the basics of AC power will be discussed along with its uses on aircraft. How the electron is controlled and manipulated will be examined. Elementary logic functions and their operators will be discussed and put to practical use. Basic troubleshooting techniques with the use of wiring diagrams, schematics, and other useful tools will be emphasized.

Lecture: 3 hours Lab: 4 hours

Prerequisite: AMT 115

Lab fee: \$20.00

AMT 150 Basic Aircraft Inspection Systems (W, SU) 2 credits

One of the most important roles of the aircraft maintenance technician is the inspection of aircraft and their components. Superior skills in this area are essential in determining airworthiness. Students in this technology need to start practicing proper inspection techniques early and understand the personal barriers that can affect the inspection process. In this course, students will begin to learn inspection skills with an introduction to basic aircraft inspection methodology, an introduction to aircraft conformity research practices, applied techniques of visual and functional defect recognition, and an introduction to nondestructive inspection and testing procedures. Maintenance record management and the human factors involved with the performance of these tasks will also be presented.

Lecture: 1 hours Lab: 3 hours

Prerequisite: AMT 110)

Lab fee: \$12.00

AMT 160 Aircraft Reciprocating Engine Maintenance 1 (A, SP) 4 credits

The vast majority of general aviation aircraft in service today are powered by reciprocating (piston) engines. An aviation maintenance technician needs a broad understanding of these powerplants to provide safe aircraft for flight. The focus of this course is the horizontally opposed reciprocating aircraft engine. Areas studied include theory of operation, engine construction features, maintenance and overhaul. Radial engine design, inspection, and repair are also addressed. Reciprocating engine lubrication system design and maintenance, for both radial and opposed engine, is examined. Students learn the proper techniques for ground operational checks of reciprocating engines.

Lecture: 2 hours – Lab: 5 hours

Prerequisite: AMT 110, AMT 140

Lab fee: \$20.00

AMT 162 Aircraft Reciprocating Engine Maintenance 2 (A, SP) 5 credits

As with any type of heat engine, an aircraft reciprocating engine has certain requirements beyond the integrity of its own components for operation. It needs delivery systems for air and fuel and some means to ignite this mixture. These sub-systems can vary from simple to very complex. This course covers the reciprocating engine ignition, fuel metering and induction systems. Students study magnetos, float carburetors, fuel injection systems, supercharging, and turbo-supercharging. Emphasis is placed on the theory of operation, inspection, maintenance practices, and trouble-

shooting of each system.

Lecture: 3 hours – Lab: 5 hours

Prerequisites: AMT 110, AMT 115, AMT 140

Lab fee: \$20.00

AMT 165 Aircraft Propellers (A, SP) 3 credits

In order to produce thrust and remain aloft, most general aviation and a limited number of commuter and corporate aircraft utilize engine-driven propellers. Aircraft propeller systems can range from the relatively simple to extremely complex machines. In this course, the principles of operation, governing systems and ice control will be covered for all types of aircraft propellers. Focus will be placed on propeller inspection, lubrication, service, repair, removal and installation.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: AMT 140

Lab fee: \$20.00

AMT 175 Aircraft Electrical Systems 1 (A, SP) 3 credits

With aircraft electrical system integrity becoming such a major factor in the operation of complex aircraft today, the need for extensive understanding of the on-board power sources is essential to the technician. In this course, the design and theory behind some of the most common DC and AC power supply systems and their controls are covered with emphasis placed on maintenance practices and troubleshooting procedures. Extensive hands-on practical study of wire terminations and connector contact techniques, including crimping and soldering, is also accomplished in this course.

Lecture: 2 hours – Lab: 3 hours.

Prerequisite: AMT 145

Lab fee: \$20.00

AMT 180 Aircraft Turbine Engine Maintenance 1 (W, SU) 5 credits

Since the dawn of jet propulsion, turbine powered aircraft have gained in popularity and played a pivotal role in the expansion of the aviation industry. A thorough understanding of turbine engine theory and operation is vital to an aircraft maintenance technician. In this course, the theory and operation of aircraft turbine engines, the study of turbine engine construction and design, and principles of turbine engine maintenance, inspection, repair, and troubleshooting will be presented. Application of procedures to remove, install, rig, and operationally test turbine engines will be accomplished, along with the identification and repair or lubrication systems and components.

Lecture: 3 hours – Lab: 5 hours

Prerequisites: AMT 110, AMT 140

Lab fee: \$20.00

AMT 182 Aircraft Turbine Engine Maintenance 2 (W, SU) 5 credits

In order to maintain turbine engines, the technician needs to be familiar with the sub-systems needed to operate the engine. A broad understanding of engine ignition, fuel, air bleed, temperature regulation, and starting systems is essential for proper maintenance to be performed. This course deals with the study of electrical principles of turbine engine ignition systems, principles of operating turbine engine electrical and pneumatic starting systems, the theory of operation of turbine engine fuel systems, fuel metering systems, and subsystems. A study of applied techniques to inspect, maintain, troubleshoot, repair and adjust the respective systems including airflow, temperature control, and thrust reverser systems will be undertaken. Principles of unducted fan systems will be examined as well.

Lecture: 3 hours – Lab: 5 hours

Prerequisites: AMT 110, AMT 115, AMT 140

Lab fee: \$20.00

AMT 190 Aircraft Ice/Rain Protection Systems (W, SU) 2 credits

In order for airplanes to fly into known icing conditions, they must have some means to prevent ice formation or to remove the ice. Ice formation on aircraft can add sufficient weight and drag to prevent safe flight. This

course will familiarize students with anti-ice, de-ice, ice detection, and rain protection systems used on the airframe, engine, and propeller installations. A large emphasis will be placed on troubleshooting and repair of the systems and associated servicing and inspection techniques.
Lecture: 1 hours Lab: 2 hours
Prerequisites: AMT 145, AMT 165
Lab fee: \$12.00

AMT 195 Aircraft Electrical Systems 2 (W, SU) 4 credits

A broad understanding of various aircraft electrical systems is imperative to a technician. Many other on-board systems depend on electrical system integrity to function properly. This course deals with complete DC and AC electrical systems overview including control and monitoring systems. Troubleshooting, inspection, and maintenance techniques related to these systems are put to practical use with a high level of expectation.
Lecture: 2 hours Lab: 4 hours
Prerequisites: AMT 175
Lab fee: \$24.00

AMT 210 Aircraft Sheet Metal Structures (A, SP) 5 credits

The primary structures of most aircraft today are made of some form of metal. An understanding of the techniques involved in forming and fabricating various components for metal structures is essential for the technician to maintain and repair airframes for continued service and reliability. In this course, students will study properties of aircraft metals, fabrication or aircraft repairs by complex bending, riveting, and use of structural adhesives. Students will design and layout repairs of metal aircraft. Students will also learn to detect, prevent, and correct corrosion of metals used in the aviation industry.

Lecture: 2 hours Lab: 8 hours
Prerequisites: AMT 120, AMT 140
Lab fee: \$28.00

AMT 212 Aircraft Wood, Dope and Fabric (A,SP) 3 credits

Many older aircraft were manufactured with fabric covering wood or metal structure. Although most modern aircraft structures are primarily metal or composite materials, many homebuilt aircraft and new light sport aircraft are reviving the use of fabric and wood. This course is an introduction to aircraft structures constructed using wood and doped fabric materials. The students will become familiar with inspection and repair techniques of wood structures. Students will also study the types of aircraft fabric covering with a focus on inspection and repair of polyester based covering.
Lecture: 2 hours – Lab: 3 hours
Prerequisites: AMT 140
Lab fee: \$26.00

AMT 215 Aircraft Environmental Controls (A, SP) 3 credits

Aircraft fly at different times of the year, at high altitudes, and in areas of the world where the climate could be hot, cold, or temperate. To compensate for these conditions, they carry on-board environmental control systems. In this class students discover how pilots and passengers remain comfortable through heating, air conditioning, pressurization, and supplemental oxygen systems and how the technician maintains them. Maintenance practices of on-board smoke, carbon monoxide, and fire detection and suppression systems are also covered.
Lecture: 2 hours – Lab: 3 hours
Prerequisites: AMT 145, AMT 149
Lab fee: \$20.00

AMT 220 Aircraft Fuel Systems (A,SP) 3 credits

Fuel supply and delivery systems play one of the most important roles in the operation of various airframe-mounted heating and auxiliary power units, as well as aircraft engines. Proper installation and maintenance of these systems is essential to the safety of flight as it relates to consistent power production for propulsion and hazards associated with system failures. In this course, students will develop an understanding of aviation maintenance procedures and the tools used by the aircraft technician in the practice of fabrication and installing fluid lines and fittings and

the knowledge the aircraft mechanic needs to properly inspect, service, troubleshoot and repair aircraft fuel systems, associated components, and related systems and subsystems.
Lecture: 2 hours – Lab: 3 hours
Prerequisites: AMT 140, AMT 145
Lab fee: \$26.00

AMT 235 Aircraft Instrumentation (W, SU) 4 credits

Aircraft instruments provide an essential part of overall cockpit situational awareness. Sometimes, the information presented from instruments is more reliable than the pilot's senses. Because of this, technicians need a broad understanding of how the instrument systems function and the maintenance required to achieve the high reliability necessary for the pilot's peace of mind and the safety of flight. In this course, students will study instrument systems for monitoring flight envelope, environment, and engine parameters. Analog and electronic display systems are covered. Practical application of troubleshooting procedures and maintenance practices associated with these devices will be accomplished with a high level of achievement expected.
Lecture: 3 hours – Lab: 2 hours
Prerequisites: AMT 145, AMT 162, AMT 182
Lab fee: \$26.00

AMT 240 Aircraft Composite Structures (W, SU) 3 credits

With the higher-strength compounds being used, improvements in shaping and lay-up technologies, and the increased weight savings, the use of composites is an intelligent choice for many components on large aircraft, as well as the entire structures of some smaller airplanes. With this increased use of these materials, it becomes more important for the aircraft maintenance technician to become familiar with the unique processes involved in fabrication and repairing composites. In this course, students will discover the principles of composites aircraft structures. The focus will be on basic composite nomenclature, inspection and repair of nonmetallic structures. Students will learn the basic core materials, types of material used, and repair procedures. This course will also cover maintenance practices related to windows, doors, and interior furnishings.
Lecture: 1 hours – Lab: 4 hours
Prerequisites: AMT 140, AMT 150
Lab fee: \$26.00

AMT 245 Aircraft Landing Gear and Fluid Power Systems (W,SU) 6 credits

One of the most stressed components on any aircraft is the landing gear assembly. Landing gear have to support the weight of the entire aircraft, absorb the forces of impact during landing and taxiing, and survive the tremendous localized heat produced during rollout by the brakes. It is for these reasons, and due to the complexity of the retractable landing gear and the nose steering systems, that the maintenance technician needs to possess extensive knowledge of landing gear and associated systems. This course will include heavy focus on hydraulic and pneumatic principles, inspection and repair of air/oil struts, wheels, brakes, tires, and the landing gear system in relation to the aircraft. Students will also learn the principles of inspection, repair, and replacement of hydraulic and pneumatic rigid and nonrigid lines.
Lecture: 4 hours - Lab: 6 hours
Prerequisites: AMT 140, AMT 150
Lab fee: \$20.00

AMT 250 Advanced Non-Destructive Inspection for Aircraft (W, SU) 3 credits

Constant inspection of aircraft and components is essential to providing aircraft that are safe for flight. In most cases, it is not cost effective or even practical to damage or destroy a component in order to determine the useable life remaining. Also, operational environments vary widely so it may not be realistic to rely on the original tests performed by the manufacturer to establish time between failures. For these reasons, it is necessary to devise ways of testing and inspecting components without having to replace them every time a technician has to inspect them. In this course, students will be engaged in an advanced study of applied

techniques for selecting and performing nondestructive inspection processes involved in the aviation industry. Techniques involving the use of sophisticated test equipment will be utilized with a high degree of practical application.

Lecture: 2 hours Lab: 3

Prerequisites: AMT 140, AMT 150

Lab fee: \$20.00

AMT 255 Aircraft Navigation & Communication Systems (A, SP) 4 credits

The use of airborne radio equipment is essential to modern-day air travel. Without it, the ability to fly to a desired destination, in varying weather conditions, while avoiding other aircraft doing the same would be an impossible task. Familiarization of the technician to aircraft warning, communication, and navigation systems is vital to the concept of safe air travel. This course will examine these systems and allow students to gain practical experience in the testing, troubleshooting, and required inspections associated with them.

Lecture: 3 hours Lab: 2 hours

Prerequisites: AMT 145

Lab fee: \$22.00

AMT 260 Aircraft Rigging & Assembly (A, SP) 3 credits

Large and small aircraft utilize correctly rigged cables or electro-hydraulic actuators to transmit the desire of the pilot to the flight controls that cause the airplane to climb, dive, roll or yaw. Also, complex devices such as entry doors, landing gear systems, and lift augmentation devices can require elaborate rigging techniques in order to function properly. In this course, students will begin with a review of the basic sciences for the aviation maintenance technician, including aerodynamics, flight stability, and theory of flight for fixed-wing aircraft. Then advanced principles and techniques of aircraft rigging, assembly, and structure alignment will be studied and put to practical use.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: AMT 110, AMT 140

Lab fee: \$24.00

AMT 262 Fundamentals of Helicopter Maintenance (A, SP) 3 credits

Helicopters are one of the many diverse areas the aviation maintenance technician can specialize in. Rotary-wing aircraft have many distinct characteristics, which make the maintenance of these machines different than conventional airplanes. Today, the widespread uses for helicopters, and their popularity, create the need to train technicians in maintenance practices that are specific to rotary wing aircraft. In this course, students will start with a review of the basic sciences for the aviation maintenance technician, including aerodynamics, flight stability, and the theory of flight for rotary-wing aircraft. Upon completion of this review, application of advanced principles and techniques of rotary-aircraft rigging, including tracking and balance of rotor blade assemblies, will be accomplished

Lecture: 2 hours – Lab: 3 hours

Prerequisites: AMT 110, AMT 140

Lab fee: \$20.00

AMT 270 Aircraft Conformity Inspections (A, SP) 5 credits

Airworthiness deals with whether an aircraft (and its components) conforms to the original type design or properly altered condition and is safe for flight. A crucial role of the Aviation Maintenance Technician is to inspect an aircraft or its components to ensure continued safe operation. In this course, aviation maintenance students will hone their inspection skills by studying the application of Federal Aviation Regulations to aircraft maintenance and the aircraft technician. With the help of aircraft maintenance forms, records, publications, and other pertinent technical data, an examination of the disposition of the required maintenance records, the use of inspection equipment and aids, the proper procedures for returning the aircraft to service, and inspection of a complete airframe,

powerplant, and all related systems will be accomplished.

Lecture: 3 hours – Lab: 7 hours

Prerequisite: AMT 150, AMT 160, AMT 165, AMT 180, and AMT 210

Lab fee: \$24.00

AMT 280 Advanced Aircraft Maintenance Practices (W, SU) 6 credits

Once students finish this program and complete the FAA certification process, they will be expected to enter the workforce and eventually master the trade through experience and further training. Starting this journey can seem overwhelming to the new technician. By placing students into real-life situations within a controlled environment, valuable experience can be gained as well as insight into future expectations. In this course, students will first complete the cooling and exhaust portion of their powerplant training, and then they will be subjected to work place scenarios in the hangar. Assignments will include tasks where they will research procedures, perform repairs, and create proper documentation.

Lecture: 4 hours – Lab: 6 hours

Prerequisites: AMT 160, AMT 165, AMT 180, AMT 195, AMT 210, and AMT 260

Lab fee: \$24.00

AMT 285 Aircraft Weight & Balance (W, SU) 3 credits

If the weight of an aircraft or the distribution of weight is not held to stringent boundaries, the safety of the aircraft is compromised. An out of limit condition can negatively affect the flight characteristics or cause the aircraft to not lift off the ground. Changes to equipment and the accumulation of debris while the aircraft is in service cause continuous changes to its weight and balance. In this course, there will be an in depth look at aircraft and helicopter weight and balance. Students will study the principles of computing weight and balance, computing and correction of adverse load conditions, and the basics of computing weight and balance for transport category aircraft. Procedures for weighing aircraft and documentation of weight and balance data are emphasized.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: AMT 101, AMT 130

Lab fee: \$12.00

AMT 290 Human Factors in Aviation Maintenance (W, SU) 4 credits

Awareness of how you or the people around you perform the tasks expected, understanding the caveats surrounding these tasks, and identifying areas where mistakes can be made during the process are all very important parts of modern aircraft maintenance. Continual monitoring and improvement in the detection/perception by individuals can dramatically reduce the errors that occur in the performance of aircraft maintenance. In this course, students will examine the major human causative agent in aircraft accidents: the human being.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: AMT 110, AMT 150

Lab fee: \$12.00

AMT 295 Aircraft Systems Review (W, SU) 3 credits

As a student progresses through the AMT program, an overwhelming amount of information spanning a multitude of diverse subject matter is presented. It would be unrealistic to expect the student to retain all this information for such a long time before becoming eligible for formal FAA certificate testing. This course prepares the graduate to take the FAA National Knowledge exam. A series of practice tests are used to determine competency of all subject areas tested. Areas of weakness are also reviewed. To successfully complete the course, and be given permission to take the FAA exams, an average score of 80% must be achieved in all three areas of testing: General, Airframe, and Powerplant.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: AMT 270

Lab fee: \$12.00

Biology (BIO)

A mandatory safety lesson (normally given in the laboratory) must be completed before the student is admitted to certain biology laboratory sessions. Approved safety glasses are required for some laboratory sessions and may be purchased through the bookstore. Attendance during the first week of class is mandatory and may affect a student's continuation in these classes. Students must complete 60% of the laboratories in a course to receive credit. Courses in this area may require additional hours outside of the scheduled class times. Prerequisite for all Biology courses above Bio 101 is high school biology completed within the last 5 years or completion of Biology 100, Bio 111, or previous college credit in biology within the last 5 years. Students enrolled in distance versions of these courses may be required to come to campus for an orientation meeting, completion of certain exams, and laboratories. Laboratories in distance learning courses are generally done on an every other week basis on campus.

BIO 100 Introduction to Biological Sciences (A, W, SP, SU,–DL) 4 credits

A general biology course in which basic principles of the characteristics of life, biochemistry, cell reproduction and genetics are explored. Students who enroll in the distance version of this course will be required to come to campus for exams and orientation meetings.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: Placement into English 100 or higher. Not open to students with credit for Biology 111, 112, 121, 125, 126, 174, 261, Natural Science 101, or subsequent course that this list serves as course prerequisites.

Lab fee: \$3.00

BIO 101 Introduction to Anatomy and Physiology (A, W, SP, SU,–DL) 3 credits

A general overview of normal human anatomy and physiology. Topics include the cell, tissues, musculo-skeletal, nervous, cardiovascular, genitourinary, digestive, respiratory, and endocrine systems.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Placement into English 100 or higher. Not open to students with credit for Biology 121, 122, 261, 269, 211 or 212.

Lab fee: \$3.00

BIO 104 Introduction to Marine Science (SP, SU and On Demand) 4 credits

An introductory course in the principles of marine science. This course is designed to introduce major concepts in physics, chemistry, geology and biology as they relate to the oceans and marine life. Shore and ocean environments as well as diversity of marine life will be emphasized. This course and BIO 105 fulfill the science requirement for the AAS degree where Natural Science 101 is required.

Lecture: 3 hours – Lab: 3 hours

Prerequisite: Placement into English 101

Lab fee: \$27.00

BIO 105 Field Investigations in Marine Science (SP, SU and On Demand) 2 credit

An introductory course providing laboratory experiences in marine science. This course will be instructed at a marine science laboratory such as Discovery Bay and Port Royal in Jamaica, West Indies. Students will spend 7 to 10 days at a marine laboratory engaged in an intense introduction to coral reefs, coastal environments, and marine life. Course will be offered over quarter breaks. Cultural and ecological experiences of the region will be included. Students will be given both snorkeling and diving instruction and thus should be strong swimmers and comfortable in the ocean. Accommodation fees at the marine lab and travel expenses will vary.

Lecture: 0 hours – Lab: 4 hours

Corequisite: BIO 104

Lab fee: \$80.00

BIO 111 Introductory Biology I (A, W, SP, SU,–DL) 5 credits

An introduction to the biological sciences for the nonmajor. Topics included are cell structure and function, bioenergetics, DNA structure and function, cell reproduction, biodiversity, ecology, and evolution. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams, and laboratories. Laboratories are generally done on an every other week basis on campus. This course and BIO 112 or BIO 115 or BIO 125 or BIO 126 or BIO 127 provide a two-quarter sequence in biological science that will fulfill the elective requirement for the Associate of Science Degree.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: Placement into English 101, high school biology or BIO 100. Not open to students with credit for BIO 174 or 175.

Lab fee: \$19.00

BIO 112 Introductory Biology II: Human Biology (A, W, SP, SU,–DL) 5 credits

An introduction to the study of human biology. Topics included are human evolution, human reproduction, human growth and development, homeostasis, the human brain, and the environmental impact of humans on earth. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: High school biology or BIO 100 or BIO 111

Lab fee: \$19.00

BIO 121 Anatomy, Physiology and Pathology I (A, W, SP, SU,–DL) 5 credits

An integrated organ systems approach to the anatomy, physiology and pathology of the human body. Topics include cell biology, histology, and integumentary, skeletal, muscular and nervous systems. Feline and human cadavers are used for demonstrations in the laboratory.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: High school biology and chemistry, or BIO 100 and CHEM 100, or NSCI 103 and placement into ENGL101. Not open to students with credit for BIO 261, BIO 269, BIO 211 or BIO 212

Lab fee: \$19.00

BIO 122 Anatomy, Physiology and Pathology II (A, W, SP, SU,–DL) 5 credits

A continuation of BIO 121. Topics include endocrinology, respiratory system hematology, cardiovascular system, metabolism, gastrointestinal system, thermal regulation, and renal and reproductive systems. Feline and human cadavers are used for demonstrations in the laboratory.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: BIO 121

Lab fee: \$19.00

BIO 124 Human Genetics (On Demand) 3 credits

Mendelian and classical genetics are presented. Emphasis is also placed on the discovery of the DNA molecule and its structure, genetic mutations and diseases, as well as genetic engineering and its implications.

Prerequisites: High school biology, or BIO 100, or NSCI 103 and ENGL 101.

Lab fee: \$3.00

BIO 125 General Botany (W) 5 credits

This course covers the biology of the major plant groups. Topics include diversity, physiology, reproduction, ecology, and economic significance.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: Placement into ENGL 101; high school chemistry and biology, or CHEM 100 and BIO 100, or NSCI 103.

Lab fee: \$18.00

BIO 126 Introduction to Ecology (On Demand) 5 credits

This course provides an introduction to ecology. Topics include population

dynamics, distribution of species, and energetics.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: BIO 111 or BIO 174, high school chemistry, CHEM 100, or NSCI 103.

Lab fee: \$16.00.

BIO 127 Environmental Science (On Demand) 5 credits

This course provides a survey of current issues in the study of environmental science. Topics include scientific principles and concepts, human population dynamics, resources and resource management, pollution, world problems, and environment and society. Emphasis will be placed on how individual actions and economic and political policies can affect the environment. Proposed solutions to environmental problems will be considered.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: Placement into ENGL 101, high school biology, or BIO 100.

Lab fee: \$19.00

BIO 174 Biological Sciences I (A, W, SP, SU,–DL) 5 credits

A course designed for biology majors that provides an in-depth coverage of cell biology, genetics and embryology. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on a weekly basis on campus. This course and BIO 175 provide a two-quarter sequence in biological science that will fulfill the elective requirement for the Associate of Science Degree.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: High school chemistry or Chemistry 100, high school biology or Biology 100

Corequisite: CHEM 111 or CHEM 171

Lab fee: \$26.00.

BIO 175 Biological Sciences II (A, W, SP, SU,–DL) 5 credits

A continuation of BIO 174. A course designed for biology majors that provides an in-depth coverage of evolution, diversity of life, animal behavior, and ecology.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: BIO 174

Lab fee: \$25.00

BIO 201 General Zoology: Animal Diversity and Systematics (On Demand) 5 credits

A survey of the diversity of organisms in the animal kingdom. Emphasis will be placed on evolutionary interrelationships, locomotory, nutritional, and reproductive strategies of the major groups. This course and BIO 174 provide a two-quarter sequence in biological science that will fulfill the elective requirement for the Associate of Science Degree.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: BIO 174

Lab fee: \$26.00

BIO 205 Introduction to Biotechnology (On Demand) 4 credits

A molecular biology course designed to introduce major concepts in DNA structure and function, gene expression, recombinant DNA, biotechnology, techniques and applications of genetic engineering, medical biotechnology (gene therapy), forensics and DNA profiling, and the impact and potential of the human genome project.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: BIO 111 or BIO 115 or BIO 124 or BIO 174

Lab fee: \$5.00

BIO 206 Introduction to Biotechnology Lab (On Demand) 1 credit

A general laboratory course designed to introduce students to the principles of biotechnology. Topics include sterile techniques; DNA isolation and purification; bacterial culture techniques, transformation, purification and isolation of plasmid DNA; DNA restriction analysis; Gel electrophoresis, PCR and RFLP analysis; and animal cell and plant tissue culture tech-

niques. This course may require additional hours outside of scheduled times.

Lecture: 0 hours – Lab: 4 hours

Prerequisite: BIO 205

Lab fee: \$27.00

BIO 211 Principles of Human Physiology I (On Demand) 5 credits

First course of a two-quarter sequence offering a detailed, in-depth exploration of neuromuscular physiology, brain and special senses, and the cardiovascular/circulatory and respiratory systems. This class and BIO 212 are suitable as transfer prerequisites for BS Nursing/Allied Health and pre-professional programs.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: BIO 261 or equivalent, CHEM 111 and 112 and placement into ENGL 101; not open to students with credit for BIO 121 or BIO 262.

Lab fee: \$6.00

BIO 212 Principles of Human Physiology II (On Demand) 5 credits

Second course of a two-quarter sequence (continuation of Biology 211) offering a detailed, in-depth exploration of renal, endocrine, reproductive and digestive physiology, thermal regulation and metabolism.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: BIO 211

Lab fee: \$6.00

BIO 215 General Microbiology (A, W, SP, SU,–DL) 5 credits

A general microbiology course for biology majors (nonmicrobiology majors). Topics covered include taxonomy, morphology and staining, culture techniques, bacterial metabolism, and physical and chemical methods for microbial control. General concepts in immunology, including host defense mechanisms and hypersensitivity, are also covered. Related laboratory is required, including identification of unknown bacteria. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams, and laboratories. Laboratories are generally done on an every other week basis on campus.

Lecture: 3 hours – Lab: 4 hours

Prerequisite: High school chemistry and biology, or CHEM 100 and BIO 100, or NSCI 103 and placement into ENGL101.

Lab fee: \$26.00

BIO 216 Microbial Diseases (On Demand) 3 credits

A basic study of the concepts of microbial disease. Topics covered are host-parasite interactions and resistance and immunity to disease, including the development of the immune system and mechanics of antigen-antibody reactions. Additional topics for detailed discussion are human airborne, foodborne and waterborne infections, and human contact diseases.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: BIO 115, ENGL 101

Lab fee: \$ 3.00

BIO 250 General Genetics (On Demand) 5 credits

The principles of genetics, including molecular genetics, transmission genetics of prokaryotes and eukaryotes, developmental and nonchromosomal genetics, and the genetics and evolution of populations.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: CHEM 252 or equivalent and BIO 111 or BIO 174, plus 5 additional hours in biology

Lab fee: \$5.00

BIO 253 Fundamentals of Human Nutrition (SU, W) 5 credits

Nutrient and food energy needs of the human biological systems throughout the life cycle with consideration of socio-psychological factors. Consideration of the role of nutrition in preventive health care and various alterations in health and disease states.

Lecture: 5 hours

Prerequisite: CHEM 112 or CHEM 113 or CHEM 253 or CHEM 261

BIO 261 Human Anatomy (A, W, SP, SU,–DL) 5 credits
The gross anatomy of the human body will be presented in detail. Thorough study will include head and neck, thorax, abdomen, pelvis, upper and lower limbs, and back regions. The laboratory study will include an in-depth study of the human cadaver.
Lecture: 3 hours – Lab: 4 hours
Prerequisite: High school biology or BIO 100 or BIO 101 or BIO 111 or equivalent
Lab fee: \$ 26.00

BIO 262 Human Physiology (A,W,SP,SU,–DL) 5 credits
An introductory course in human physiology designed to cover the normal physiology of all organ systems. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus.
Lecture: 4 hours – Lab: 3 hours
Prerequisite: BIO 161 or equivalent, placement into ENGL 101; not open to students with credit for BIO 122 or Bio 211 or BIO 212
Lab fee: \$13.00

BIO 263 Human Pathophysiology (A, W, SP, SU,–DL) 5 credits
This course deals with the disordered functioning of the human body due to disease. It is designed for students or practitioners in nursing or other allied health professions who wish to increase their understanding of the changes occurring in physiology due to an abnormality.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: BIO 169 or BIO 211 and 212 or equivalent CHEM 112 or CHEM 113 or equivalent, or permission of instructor
Lab fee: \$3.00

BIO 290 Capstone Experience in Biology (A, W, SP, SU) 3 credits
An integrated science course blending elements of chemistry, physics and biology. Topics include the historical development of the sciences, ethical issues in science and how they affect the advancement of scientific thought, and the scientific method as it relates to experimental design and interpretation of scientific results. The laboratory utilizes an investigative approach taking students through the process of identifying a research problem, conducting a literature review, writing a research proposal, collecting and analyzing data, writing a scientific paper, and presenting results. This course is required for all biological science majors seeking either the Associate of Arts or Associate of Science degree.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: 75 hours or more of course work completed with a minimum of 20 credit hours within the sciences
Lab fee: \$19.00

BIO 293 Independent Study in Biology (On Demand) 1 to 5 credits
Detailed examination of selected topics of interest in biology.
Lecture: 1 to 5 hours – Lab: 0 to 6 hours
Prerequisite: Permission of instructor

BIO 299 Special Topics in Biology (On Demand) 1 to 5 credits
Detailed examination of selected topics of interest in biology.
Lecture: 1 to 5 hours – Lab: 0 to 6 hours
Prerequisite: Permission of the instructor

Business Management (BMGT)

Note: Courses taught at a distance (Distance Learning [DL]) may have higher lab fees than traditionally taught courses.

BMGT 101 Principles of Business (A, W, SP, SU,–DL) 5 credits
A discussion of all significant activities in the field of business including the interaction of business with internal and external forces, ownership,

management, marketing, production, human resources, finance, and control. These areas are discussed as they relate to the basic principles of management and economics.
Lecture: 5 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 102 Managing Interpersonal Skills I (A, W, SP, SU,–DL) 3 credits
This course introduces the student to management themes and the five primary skill sets required to be a successful manager. The course provides opportunities for students to begin to learn, develop, and apply managerial skills through personal assessment and an introduction to various skill concepts and behavior models.
Lecture: 1 hour – Lab: 4 hours
Lab fee: \$5.00

BMGT 103 Managing Interpersonal Skills II (W, SP,–DL) 3 credits
This course builds upon BMGT 102 and expands the students understanding of Temperament and Type theory. Students also learn the basics of Emotional Intelligence and how to apply these management tools to motivate and improve performance.
Lecture: 1 hour – Lab: 4 hours
Prerequisite: BMGT 102
Lab fee: \$5.00

BMGT 104 Stress Management (On Demand,–DL) 1 credit
This course will help students learn how to recognize work related stress and stress related problems, how to evaluate their optimal stress levels, and develop strategies to deal with work related stress.
Lab: 2 hours
Lab fee: \$5.00

BMGT 105 Time Management (On Demand,–DL) 1 credit
This course will help students learn how to evaluate, organize, and manage their time and projects more efficiently and effectively.
Lab: 2 hours
Lab fee: \$5.00

BMGT 106 Budgeting (On Demand,–DL) 1 credit
This course introduces the student to basic concepts in budgeting for profit organizations.
Lab: 2 hours
Lab fee: \$5.00

BMGT 111 Management (A, W, SP, SU,–DL) 5 credits
The basic management functions of planning, organizing, leading, controlling, and staffing business organizations are covered. The organization is viewed as a system of interdependent parts which interacts with the outside environment. Topics include leadership, motivation, communication and problem solving.
Lecture: 5 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT A111 Management History and Environment (On Demand,–DL) 1 credit
This course will explore the history of management and environmental factors which impact on the management function. Students will learn the historic evolution of management, the environmental factors which impact on management, the importance of ethical behavior in management, and the global perspective of management.
Lab: 2 hours
Lab fee: \$5.00

BMGT B111 Planning (On Demand,–DL) 1 credit
This course presents the basics of the management function of planning. Students will learn why managers plan, how organizations plan, the different types of plans, the decision making process, and what comprises strategy planning.

Lab: 2 hours
Lab fee: \$5.00

BMGT C111 Organizing (On Demand,-DL) 1 credit
This course presents the basics of the management function of organizing. Students will learn organizational structure design techniques, how companies organize, and how communication and human resources management impact organizational management.
Lab: 2 hours
Lab fee: \$5.00

BMGT D111 Leading (On Demand,-DL) 1 credit
This course presents the basics of the management function of leadership. Students will learn how human behavior, groups, and motivational theories impact leadership.
Lab: 2 hours
Lab fee: \$5.00

BMGT E111 Controlling (On Demand,-DL) 1 credit
This course presents the basics of the controlling function of management. Students will learn the importance of the control process and the value of operations management.
Lab: 2 hours
Lab fee: \$5.00

BMGT 201 Creative Problem Solving; Applications in the Workplace (A, SP) 3 credits
This course will provide an exploration of the foundations of creativity skills and methods for application in an organizational environment. The application to problem solving, decision-making, and planning will be taught through various models and best practices currently utilized in organizations. Case studies and various creativity methodologies will be explored and practiced during the class sessions.
Lecture: 1 hour – Lab: 4 hours
Lab fee: \$5.00

BMGT 202 Facilitating Organizational Processes (W, SU) 3 credits
This course introduces students to the importance and value of effective group facilitation skills within the daily operation of organizational functions. Student will learn how to select and evaluate tools, methods, and techniques that impact group business outcomes. Specific organizational practices which enhance facilitation techniques include coaching, use of audiovisual technology, diversity awareness, and systems analysis. Lab work will include the exploration and practice of facilitating different types of groups.
Lecture: 1 hour – Lab: 4 hours

BMGT 204 Management in the Political Environment (A, W, SP, SU) 4 credits
A study of American government activity as it pertains to the formulation of public policy imposing, by legislative/regulatory means, certain legal parameters impacting the way in which the business community is allowed to conduct its activities. Major concentration will be devoted to the growing importance, necessity, right / duty of the Business Manager to become involved and skilled in the arts of government and political affairs as part of their responsibility to the business organization.
Lecture: 4 hours
Lab fee: \$5.00

BMGT 208 Organization Communication (A, SP,-DL) 3 credits
Organizational Communication course will provide students with the knowledge and skills necessary to pursue careers dependent on human interaction in business, industry, or government. Bridging the gap between the classroom and the workplace is an objective of the organizational communication course. Emphasis will be placed on communication structure and process within organizations and the need for individual and group communication skill development.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 211 Organizational Behavior (A, W, SP, SU,-DL) 4 credits
An introduction to fundamental concepts and applications of individual, group, and organizational behavior in the workplace. Topics include foundations of organizational behavior, perception and individual decision making, values, attitudes, the foundations of group behavior, understanding work teams, and organizational dynamics.
Lecture: 3 hours – Lab: 2 hours
Prerequisite: BMGT 111
Lab fee: \$5.00

BMGT 216 Business Ethics (A, W, SP, SU,-DL) 3 credits
A comprehensive and practical study of ethical systems designed to explore, analyze and evaluate the organizational values, strategic policies, and expected behaviors required to develop high ethical standards both on a personal and organizational level. Emphasis will be placed on case studies and exercises in ethical behaviors.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 218 Management Training for Supervisors (A, W, SP, SU,-DL) 5 credits
A comprehensive examination of management functions, techniques and the role of a supervisor. This course will increase awareness of the supervisory role and present proven methods and techniques to improve performance. Major areas covered include setting objectives, problem identification techniques, decision-making, time management, management styles, motivation, training subordinates, performance evaluation, verbal and nonverbal communications, interviewing techniques, and a look at the challenge of leadership in an organizational setting. Emphasis is placed on actual on-the-job problems.
Lecture: 5 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 219 International Business (A, SP,-DL) 3 credits
The course focuses on the economic, social and cultural considerations in doing business overseas. The globalization of markets and the growth of overseas business ventures are explored. The need to develop varied techniques for managing people from different cultural backgrounds, the means of minimizing risks in financial transactions, and development of systems for coordinating and controlling operations is stressed. Techniques to overcome international business barriers are examined.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 220 Leadership Fundamentals (A, W, SP, SU,-DL) 3 credits
This course provides an in-depth study of leadership styles, skills, roles, and the functions of leaders in organizations. The course integrates writings from the humanities, military leaders, political leaders, religious leaders, and business leaders with basic leadership principles. The course provides the opportunity for the student to explore the concept of leadership and to develop and improve his/her leadership skills.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: BMGT 102
Lab fee: \$5.00

BMGT 229 International Management (On Demand) 4 credits
This course focuses on the concepts and skills needed to achieve organizational goals and achieve strategic initiatives in a multicultural environment, as affected by political/legal, economic and technological issues. Strategic use of cultural and language diversity is stressed as a competitive advantage in achieving global organizational goals. Students will be introduced to a global business vocabulary or glossary to aid them in doing business overseas. Concepts are applied not only to those who go to another country to manage local citizens, but also to those in this country who manage people from other countries. Emphasis is placed on the changing nature of the international management challenge. Emphasis will be placed on developing and managing various types of strategic alliances and/or human resource management, as well as conflict resolution

and negotiation techniques
Lecture: 3 hours – Lab: 2 hours
Prerequisite: BMGT 111 or BMGT 219
Lab fee: \$5.00

BMGT 230 Organizational Development and Change Management (A, SP) 5 credits

This course explores contemporary organizational development which is defined as the application of knowledge, skills, and tools to improve organizational performance, enhance organizational functioning, and maximize human potential. This course adopts a strategic perspective, and provides concepts and tools related to diagnosing an organization's problems or intentions, designing interventions to help them overcome obstacles and/or achieve their goals, leading and managing the resulting change process, and evaluating and institutionalizing new organizational strategies.

Lecture: 5 hours
Prerequisites: Successful completion of BMGT 101–Principles of Business, or BMGT 111–Management, IN ADDITION TO prerequisites of BMGT 211–Organizational Behavior
Lab fee: \$5.00

BMGT 231 Small Business Development (A, W, SP, SU,–DL) 4 credits

First of a two-quarter sequence that introduces the fundamental considerations in planning and executing the start-up of a new small business venture. Concentrates on planning selected critical aspects of a business plan in the areas of orientation to small business, strategic planning, financial considerations, location, layout and beginning inventory.

Lecture: 4 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 232 Small Business Operations (A, W, SP, SU,–DL) 4 credits

This course is a sequel to BMGT 231 and completes the basic instruction necessary for competence in managing a small business enterprise. Topics covered will include effective operation of an established business with emphasis on strategic planning, market analysis, pricing, inventory control and credit collections.

Lecture: 4 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 234 Case Studies in Small Business (A, SP) 4 credits

Cases covering all functional areas of small business management are analyzed and presented. Emphasis is placed on the problem-solving process as a tool for developing and implementing small business management strategies and operational techniques

Lecture: 4 hours – Lab: 0 hours
Prerequisites: BMGT 231 and BMGT 232
Lab fee: \$5.00

BMGT 235 Strategic Business Planning (A, W, SP, SU) 5 credits

Preparation and presentation of a formal business plan using the latest computer software. Presentation of the business plan is delivered to a team of observers, including local business persons and faculty.

Lecture: 2 hours – Lab: 6 hours
Prerequisite: Permission of instructor
Lab fee: \$5.00

BMGT 236 Franchising (On Demand) 3 credits

This course introduces the fundamentals of franchising, from both the franchisee and franchiser points of view. The focus of the course is the franchise as a tool for those buying a business and those wanting to expand an existing business. Contractual arrangements covering the establishment and the operation of a franchise, as well as the relationship between the franchisee and the franchiser are reviewed. Distributorships and licensing also introduced.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: BMGT 231 or permission of instructor
Lab fee: \$5.00

BMGT 237 Home Based Business (A, SP) 4 credits

This course is designed specifically for individuals who strive to commence their own business or have a recently established venture. The goal is to prepare students for the challenges of operating a business, bring awareness of potential situations, and elicit methods for handling them effectively. Focus is on the realities of beginning, growing, and leading a business. This course also includes a student field study of an existing business or a concentration on an area of concern in the student's established business.

Lecture: 3 hours – Lab: 2 hours
Prerequisite: BMGT 231 or permission of instructor
Lab fee: \$5.00

BMGT 238 Small Business Management Practicum (A, W, SP, SU) 4 credits

Supervised, cooperative work experience with on-the-job application of knowledge and skills acquired in the classroom.

Lecture: 0 hours – Lab: 40 hours
Prerequisite: Permission of instructor
Co-requisite: BMGT 239
Lab fee: \$2.00

BMGT 239 Small Business Management Seminar (A, W, SP, SU) 2 credits

On-campus seminar which allows students to report on small business management knowledge gained in specific areas of the internship. The course may include a market research survey, case reports, or other special projects.

Lecture: 2 hours – Lab: 0 hours
Prerequisite: Permission of instructor
Corequisite: BMGT 238
Lab fee: \$1.00

BMGT 245 Introduction to Nonprofit Management (A) 5 credits

This course traces the history, philosophy, and societal role of nonprofits in the United States, and how social sector organizations today compare organizationally to public and private sector organizations. Additionally, this course explores the characteristics of effective and ethical management and leadership in nonprofit organizations. More specifically, it explores the fundamental challenges to effective leadership including defining and articulating the organization's mission, formulating relevant organizational strategy, crafting an aligned organizational structure, identifying and understanding the multiple "customers" served, and identifying and prioritizing the critical strategic managerial tasks that must be successfully executed. As such, it examines the roles of the executive director, the board, staff, and volunteers.

Lecture: 5 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 246 Operational Management of Nonprofit Organizations (W) 5 credits

This course focuses on the "tactics" of strategy implementation in a nonprofit organization. It answers the question, "Now that we have determined our mission and strategic goals, what do we have to do to get there?" As such, this course explores human resource development and supervision, program planning, managing volunteers, outcome assessment and measurement, board and committee development, and risk management.

Lecture: 5 hours – Lab: 0 hours
Lab fee: \$5.00

BMGT 247 Legal and Financial Issues in Nonprofit Management (SP) 5 credits

This course introduces the legal and financial issues relevant to managing a 501 (c) (3) nonprofit organization. Issues to be addressed include organizing the entity, qualifying for and maintaining nonprofit status, principles of fundraising, and strategic marketing. Financial areas covered include the principles of fiscal responsibility for nonprofits, as well as cost

accounting, budgeting, the presentation of financial statements, proposed development, and in-kind resources

Lecture: 5 hours – Lab: 0 hours

Lab fee: \$5.00

BMGT 248 Leadership Seminar in Nonprofit Management (SU) 5 credits

This course is a project-based capstone learning experience that will facilitate the application of knowledge acquired in BMGT 245, 246, and 247 to a contemporary problem or initiative in a nonprofit organization. Leadership strategies relevant to a nonprofit organizational context and an exploration of professional motivation and commitment will also be explored.

Lecture: 4 hours – Field Experience: 7 hours

BMGT 253 The Art and Science of Conflict Resolution (A, W, SP, SU,–DL) 4 credits

This course provides students with a basis and a context for effectively managing conflict. The course covers fundamentals of emotional intelligence and emotional intelligence competencies; a critical thinking model; various models of conflict management; dealing with disruptive and antagonistic behaviors; and the eight elements of effective conflict management. The course focuses on theory and practical application and is designed to equip managers with both the basic theoretical knowledge and initial practical experience needed to manage conflict effectively.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$10.00

BMGT 257 Project Management Principles (A, SP) 3 credits

This course introduces students to the basic concepts of project management. Students learn to define the scope of a project; minimize change of scope; establish goals; define dependency networks; communicate the project plan; use Program Evaluation and Review Techniques (PERT) charts and Critical Path Management; schedule projects; establish tasks, sub tasks, and milestones; and assign resources to tasks. Students use matrix management principles and tools as a way to facilitate project planning and monitoring. Students are required to plan a project from inception to completion.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$5.00

BMGT 258 Planning and Process Improvement Tools (A, SP) 3 credits

This course provides students with a variety of tools, techniques, and methodologies that enhance organizational problem-solving, planning, and process analysis and improvement. Students will become familiar with application of these tools and learn which is best suited to a particular organizational challenge.

Lecture: 4 hours

Lab fee: \$5.00

BMGT 261 Business Management Practicum I (A, W, SP, SU) 4 credits

Supervised, on-the-job application of knowledge and skills acquired in the classroom. Advisor approval required the quarter before the student actually begins the internship.

Lecture: 0 hours – Lab: 40 hours

Prerequisite: Permission of instructor

Corequisite: BMGT 262

Lab fee: \$2.00

BMGT 262 Special Problems in Business Management I (A, W, SP, SU) 2 credits

Application of business management knowledge to specific areas of on-the-job internship via a report.

Lecture: 0 hours – Lab: 4 hours

Prerequisite: Permission of instructor

Corequisite: BMGT 261

Lab fee: \$1.00

BMGT 263 Business Management Practicum II (A, W, SP, SU) 4 credits

Continuation of BMGT 261.

Lecture: 0 hours – Lab: 40 hours

Prerequisite: BMGT 261

Corequisite: BMGT 264

Lab fee: \$2.00

BMGT 264 Special Problems in Business Management II (A, W, SP, SU) 2 credits

Continuation of BMGT 262.

Lecture: 0 hours – Lab: 4 hours

Prerequisite: BMGT 262

Corequisite: BMGT 263

Lab fee: \$1.00

BMGT 271 Management Decisions (A, W, SP, SU,–DL) 2 credits

A practical experience integrating the application of fundamental accounting, marketing, and operations management principles to the decision making process in business. The course is presented via computer simulation.

Lecture: 0 hours – Lab: 4 hours

Prerequisites: ECON 200, FMGT 201, MKTG111, BMGT 111 and ACCT 107

Lab fee: \$10.00

BMGT 272 Case Studies in Business Seminar (A, W, SP, SU,–DL) 3 credits

As a part of the capstone experience this course requires the student to draw on and integrate knowledge learned in all previous classes. The fundamentals of problem solving and decision making are applied using the case study approach in a variety of organizational situations. Note: Open to Business Management students only in their last two quarters after course prerequisites have been met. Course expectations for non-Business Management students include mastery skills in basic business, accounting, finance, marketing, and business law.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ACCT 107 and ENGL 200

Lab fee: \$5.00

BMGT 273 Management Service Project (A, W, SP, SU) 3 credits

This course requires the student to serve in a leadership role as a member of an external team in a community-based, project setting in a private industry, public sector agency, or not-for-profit organization, or to serve as a facilitator for a team in the Managing Interpersonal Skills course. In a community-based project setting, the student will lead the team in the identification, analysis, and development of potential solutions to one or more problem situations. As a team facilitator, the student will facilitate the team in developing and accomplishing assigned tasks.

Lecture: 1 hour – Lab: 4 hours

Lab fee: \$10.00

BMGT 276 Assessment, Analysis and Evaluation Skills (A, SU) 4 credits

This course provides students with the opportunity to develop their knowledge and skills in the basics of training assessment and evaluation. Course topics include needs assessment, data collection, data analysis, performance assessment, levels of evaluation, testing, and evaluation methods. This course will emphasize application of assessment and evaluation techniques on projects from students' personal or work experiences.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$10.00

BMGT 277 Instructional Design and Development Skills (A, W) 4 credits

This course provides the basic knowledge and skills necessary for the systematic design, development, and evaluation of instruction and training by focusing on the design of instruction/training programs, development of ef-

fective strategies and materials, and the evaluation of instruction/training. Emphasis is placed on application of instructional design methodology. Students will demonstrate skills through the development of and delivery of training materials related to their area of work or personal interest.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$10.00

BMGT 278 Training Delivery Skills (W, SP) 4 credits

This course provides basic knowledge and skills required to conduct effective training. Topics include the training and development process, effective training competencies, adult learning practices, on-the-job training process, the learning environment, facilitation skills, presentation skills, feedback guidelines, visual aids, and reinforcement for transfer of learning to the workplace. Application of effective training delivery skills is emphasized. Students will demonstrate skills through the development and delivery of training materials related to their area of work or personal interest.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$10.00

BMGT 280 Business Etiquette (A, W, SP, SU) 3 credits

Business Etiquette provides students with a competitive advantage in a variety of situations. Students learn to use business etiquette to improve communication through e-mail, written correspondence, and the telephone. Students learn how to improve relations with customers, employees, supervisors, and peers by learning how to accept gifts and compliments and use social graces while eating or attending social activities. Students learn appropriate dress, posture, hand-shakes, and nonverbal communication. The course explores cultural differences in global etiquette.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$10.00

BMGT 281-285 Studies in Contemporary Business (A, W, SP, SU) 1-5 credits

Studies in Contemporary Business is a specially designed course offering to meet the needs of the constantly changing business community and student population.

Lecture hours: May vary – Lab hours: May vary

Prerequisite: Permission of instructor

Chemistry (CHEM)

A mandatory safety lesson must be completed before the student is admitted to any other chemistry laboratory sessions. Approved Chemical Splash Resistant goggles are required and may be purchased through the bookstore. Certain clothing restrictions exist and will be explained by the instructor. Attendance during the first week of class is mandatory and may affect a student's continued enrollment in these classes. Students must earn at least 60% of the total laboratory points in the course to receive a passing grade. Courses in this area may require additional hours outside of the scheduled class times. High school chemistry must have been completed within the last 3 years in order to meet the prerequisite requirement.

CHEM 100 Introduction to Chemistry (A, W, SP, SU, -DL) 4 credits

A preparatory chemistry course covering the basic concepts of chemistry with emphasis on the physical and chemical properties of matter, problem-solving, and an introduction to chemical reactions. Related laboratory work and demonstrations. Safety training and goggles are required for laboratory sessions. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning course are generally done on an every other week basis on campus.

Lecture: 3 hours – Lab: 3 hours

Prerequisite: MATH 102 or higher, placement into ENGL 100 or higher; not open to students with credit for CHEM 111, 112, 113, 171, 172, or 173

Lab fee: \$13.00

CHEM 110 Chemistry and Society (A, W, SP, SU) 5 credits

A course for nonscience majors intended to acquaint students with the science of chemistry as it relates to modern technological society, and to help students learn about chemistry in the context of their everyday lives. This course will also help students realize the interconnection between chemistry and other disciplines in the natural sciences. The material in the course focuses on the practical significance of basic chemistry in the context of social, political, and economic issues that affect our world. In addition, this course will provide students with an interactive laboratory experience. Safety training and goggles are required for participation in laboratory sessions.

Lecture 4 hours – Lab: 3 hours

Prerequisites: Placement into Math 102 or higher and placement into ENGL 101

Not open to students with credit for Chem 111 or higher

Lab fee: \$ 19.00

CHEM 111 Elementary Chemistry I (A, W, SP, SU, -DL) 5 credits

An introductory course in fundamental chemical concepts and laboratory techniques. Topics include atomic structure, periodic classification of elements, stoichiometry, solutions, acids and bases, pH and buffers, the gas laws, chemical equilibrium, and nuclear chemistry. Safety training and goggles are required for laboratory sessions. This course and CHEM 112 provide a two-quarter sequence in physical science that will fulfill the elective requirement for the Associate of Science Degree. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning course are generally done on an every other week basis on campus

Lecture: 4 hours – Lab: 3 hours

Prerequisite: MATH 102 or higher; placement into ENGL 101; not open to students with credit for CHEM 171, 172, or 173

Lab fee: \$19.00

CHEM 112 Elementary Chemistry II (A, W, SP, SU, -DL) 5 credits

An introductory course in fundamental organic chemistry and laboratory techniques. Course covers the study of carbon compounds organized according to functional groups including carbohydrates, lipids, proteins, enzymes, and vitamins. Emphasis is placed on physiological function. Safety training and goggles are required for laboratory sessions. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning course are generally done on an every other week basis on campus

Lecture: 4 hours – Lab: 3 hours

Prerequisite: CHEM 111; not open to students with credit for CHEM 171 or CHEM 251 or higher.

Lab fee: \$19.00

CHEM 113 Introduction to Organic and Biochemistry (A, W, SP, SU, -DL) 5 credits

This is a course in elementary chemical concepts designed primarily for allied health students. It includes the study of principles of general chemistry as applied to physiological functions; basic organic chemistry, especially related to functional groups; and biochemistry including carbohydrates, lipids, proteins, enzymes and nucleic acids. Safety training and goggles are required for the laboratory session. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning courses are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: High school chemistry completed within the last 3 years

or CHEM 100 or 111 or successfully completing a chemistry placement exam; MATH 102 or higher; and placement into ENGL 101. Not open to students with credit for CHEM 112 or CHEM 251
Lab fee: \$19.00

CHEM 171 General Chemistry I (A, W, SP, SU, – DL) 5 credits

A course in fundamental chemical principles for chemistry majors and pre-professionals. Topics include chemical calculations, the mole concept, atomic structure, periodic classification, bonding, the behavior of gases, and thermochemistry. Laboratory sessions provide bench experiences. Students will be required to participate in a laboratory research experience. Safety training and goggles are required for laboratory sessions. This course and CHEM 172 provide a two-quarter sequence in physical science that will fulfill the elective requirements for the Associate of Science Degree. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning courses are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: High school chemistry or CHEM 100 or 111, completion of or concurrent enrollment in MATH 148 or equivalent, and placement into ENGL 101

Lab fee: \$19.00

CHEM 172 General Chemistry II (A, W, SP, SU, – DL) 5 credits

A continuation of CHEM 171. Topics include chemical bonding, molecular geometry, behavior of liquids and solids, solutions, kinetics, equilibrium, and acid-base chemistry. Laboratory sessions provide bench experiences. Students will be required to participate in a laboratory research experience. Safety training and goggles are required for laboratory sessions. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning courses are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: CHEM 171

Lab fee: \$19.00

CHEM 173 General Chemistry III (A, W, SP, SU, – DL) 5 credits

A continuation of CHEM 172. Topics include buffers, solubility equilibria, atmospheric chemistry, entropy and free energy, electrochemistry, the chemistry of metals and nonmetals, coordination complexes, and nuclear chemistry. Laboratory sessions provide bench experiences. Students will be required to participate in a laboratory research experience. Safety training and goggles are required for laboratory sessions. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories in distance learning courses are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: CHEM 172

Lab fee: \$19.00

CHEM 251 Organic Chemistry I (A, W, SP, SU) 5 credits

The first course in a three-course sequence in organic chemistry. Structure, nomenclature, physical properties, bonding and reactions of alkanes, alkenes, and alkyl halides.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: CHEM 173

Lab fee: \$6.00

CHEM 252 Organic Chemistry II (A, W, SP, SU) 5 credits

The second course in a three-course sequence in organic chemistry. This course includes the study of physical and chemical properties of aromatic compounds, alcohols, thiols, ethers, epoxides, sulfides, carbonyl compounds, carboxylic acids and their derivatives, and carbohydrates.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: CHEM 251

Lab fee: \$6.00

CHEM 253 Organic Chemistry III (A, W, SP, SU) 5 credits

The third course in a three-course sequence in organic chemistry. This course includes the study of spectroscopic methods, molecular orbital theory, polymers, the chemical and physical properties of amines, amino acids, proteins, lipids, and nucleic acids.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: CHEM 252

Lab fee: \$6.00

CHEM 254 Organic Chemistry Laboratory I (A, W, SP, SU)

3 credits

The first course in a two-course sequence in organic chemistry laboratory. This course introduces the student to laboratory techniques of organic chemistry, including synthesis, isolation, purification, and identification of organic compounds. Students will be required to participate in a laboratory research experience.

Lecture: 1 hours – Lab: 8 hours

Prerequisite: CHEM 251

Lab fee: \$39.00

CHEM 255 Organic Chemistry Laboratory II (A, W, SP, SU) 3 credits

The second course in a two-course sequence in organic chemistry laboratory. This course includes further study of organic laboratory techniques including synthesis, isolation, purification, and identification of organic compounds. Students will be required to participate in a laboratory research experience.

Lecture: 1 hours – Lab: 8 hours

Prerequisites: CHEM 252 and 254

Lab fee: \$39.00

CHEM 261 Introduction to Biochemistry (A, W, SP, SU) 5 credits

This is an introductory course in biochemistry dealing with the molecular basis of structure and metabolism of plants, animals, and microorganisms.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: CHEM 252 and two quarters of biological science

Lab fee: \$6.00

CHEM 290 Capstone Experience in Chemistry (On Demand) 3 credits

An integrated science course blending elements of chemistry, physics and biology. Topics include the historical development of the sciences, ethical issues in science and how they affect the advancement of scientific thought, and the scientific method as it relates to experimental design and interpretation of scientific results. The laboratory utilizes an investigative approach taking students through the process of identifying a research problem, conducting a literature review, writing a research proposal, collecting and analyzing data, writing a scientific paper and presenting results. This course is required for all science majors seeking either the Associate of Arts or Associate of Science degree.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: 75 hours or more of course work completed with a minimum of 20 credit hours within the sciences with at least 10 hours in chemistry

Lab fee: \$18.00

CHEM 293 Independent Study in Chemistry (On Demand)

1 to 5 credits

Detailed examination of selected topics of interest in chemistry.

Prerequisite: Permission of instructor

Lab fee: Varies

CHEM 299 Special Topics in Chemistry (On Demand)

1 to 5 credits

Detailed examination of selected topics of interest in chemistry.

Lecture: 1 to 5 hours – Lab: 0 to 6 hours

Prerequisite: Permission of the instructor

Lab fee: Varies

Chinese (CHIN)

CHIN 101 Elementary Chinese I (A, W, SP, SU) 5 credits

Introduction to the fundamentals of the Madarin Chinese language with practice in listening, speaking, and simplified Chinese characters. Includes selected studies in Chinese culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

CHIN 102 Elementary Chinese II (W, SP) 5 credits

Continuation of CHIN 101 with further development of listening and speaking skills. Some focus on writing skills and further study of Chinese culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: CHIN 101 with a grade of “C” or better or by placement exam.

Lab fee: \$6.00

Civil Engineering Technology (CIVL)

Also see Surveying (SURV)

CIVL 120 Basic Construction Materials (A, W, SP, SU) 3 credits

A study of the properties, construction applications, standards, specifications and elementary material testing methods of soils, aggregates, asphalts, portland cement concrete, masonry, metals and woods. Laboratory exercises include basic common construction industry materials testing procedures and comparison of results to industry standards and specifications.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: MATH 102 or placement into a higher level mathematics course

Lab fee: \$20.00

CIVL 121 Heavy Construction Materials (W) 3 credits

A comprehensive study and application of the material testing methods of soils, aggregates, asphalt, and Portland Cement concrete required in the heavy construction industry. The laboratory exercises provide fundamental hands-on experience in preparation for the American Concrete Institute (ACI) Grade 1 Concrete Field Technician exam. Preparation in the ACI Grade 1 Contract Field Technician test is a course requirement.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIVL 120

Lab fee: \$55.00

CIVL 123 Heavy Construction Drawings (A, W, SP) 3 credits

Reading and interpretation of construction drawings as related to highway and public works construction projects. Interpretation of the relationships of plans, elevations, sections and details, and the coordination with published specifications. A basic method of material quantity take-off will be explained.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$15.00

CIVL 125 Heavy Construction Methods (W, SP) 3 credits

A study of methods used to build horizontal projects, such as highways, dams, airports, bridges and utility lines. The various pieces of equipment and materials used in these type projects will be explained as well as the processes used.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$5.00

CIVL 221 Elementary Hydraulics (A, W) 3 credits

A study of liquids at rest and in motion in enclosed conduits and open channels. The effects of static heat, velocity, pressure and friction in enclosed piping systems are analyzed. Principles of pump systems, pump station design and detailing are emphasized. Fundamentals of open channel flow, quantification of rainfall runoff and culvert design are introduced.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: MATH 104 or 112

Lab fee: \$12.00

CIVL 223 Public Utility Systems (W) 3 credits

A study of the principles of public utility theory, planning, design and detailing. Emphasis is placed on applying current design standards and local and state regulations to the planning, design and plan preparation for sanitary collection systems, storm water management systems and water distribution systems. Detail plan preparation using CAD systems is also emphasized.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: CIVL 221 and 123

Lab fee: \$12.00

CIVL 243 Heavy Construction Estimating (A, SU) 3 credits

A comprehensive study of the topics associated with, and unique to, heavy/highway construction estimating. The major focus of the course will involve determining the cost factors of the equipment-intensive operations associated with heavy/highway construction. The secondary focus will be relating the equipment selection and cost factors to the labor requirements, materials’ price extensions, and time requirements as utilized in the model crew method of estimating.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: CIVL 123, CMGT 125 and CMGT 131

Lab fee: \$9.00

CIVL 291 Field Experience (SU) 3 credits

Off-campus work experience in civil engineering, consulting engineering or surveying industry that augments formal education received in the technology, with actual work conditions and job experience. “N” credit will not be allowed for this course.

Lecture: 0 hours – Lab: 36 hours

Lab fee: \$5.00

CIVL 299 Special Topics in Civil Engineering Technology (On Demand) 1-5 credits

Special topics in civil engineering technology industry designed to meet specific needs.

Lecture: 1 hour – Lab: 1-15 hours

Prerequisite: Permission of instructor

Lab fee: \$10.00

Communication Skills (COMM)

(Also see English, Technical Communication, and Theater)

Note: Courses taught at a distance (Distance Learning) may have a higher lab fee than traditionally taught courses.

COMM 105 Speech (A, W, SP, SU, – DL) 3 credits

Emphasis is placed on both verbal and nonverbal communication techniques in public speaking. Individual presentations, including at least three major speeches, are required. The fundamental principles of interpersonal communications and small group discussion are introduced. Audio and/or video taping of selected projects will occur. This course, or its equivalent,

Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 101 or 111
Lab fee: \$3.00

COMM 110 Conference and Group Discussion
(A, W, SP, SU, – DL) **3 credits**

Through role play, discussion, and participation, students will develop attitudes, skills, and knowledge of methods necessary to effectively participate in discussion at conferences, in committees, and in other small groups. This course is recommended as a substitute for COMM 105 in some technologies. Check with academic advisor.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 101 or 111
Lab fee: \$3.00

COMM 115 Oral Interpretation (A, W, SP, SU, – DL) 3 credits

Students will read literature orally and listen critically. They will then practice techniques for presenting literature dramatically. The cultural and social functions of oral literature will be discussed. Emphasis will be placed on analyzing literary works, recognizing their emotional and dramatic values, and projecting those qualities through oral presentations. Writing assignments include response journals and short critical papers. This course is recommended as a substitute for COMM 105 for all Associate of Arts and Associate of Science students.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 101 or 111
Lab fee: \$3.00

COMM 150 Video Art Production (A, W, SP) 5 credits

This course introduces students to the art of independent film and video through analysis of short films and production of digital video shorts. Students will analyze independent films and videos to develop a descriptive definition of video as a collaborative art form. Students will learn digital video photography, conversion of VHS to digital form, script writing, editing, and post production in iMovie (Macintosh non-linear editing software for non-professionals). Students will create short videos in selected genre, such as biographical narrative, the parody, or the community-interest documentary.

Lecture: 4 hours- Lab: 2 hours
Prerequisite: ENGL 102 or equivalent with a grade of “C” or higher required; ENGL 245–Introduction to Film is recommended
Lab Fee: \$ 25.00

COMM 220 Introduction to Mass Communication (A, W, SP, SU,–DL) 5 credits

Students will become better consumers of news and other mass media through the study and discussion of the history, roles, and impact of mass media in American society. Principal ethical, policy, and legal questions confronting reporters and media are reviewed. Students are introduced to news writing, advertising, and public relations techniques.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111
Lab fee: \$3.00

Introduction to Film (A, W, SP, SU,–DL) 5 credits
(See ENGL 245)

COMM 250 Advanced Video Art Production (On Demand) 5 credits

This course is a continuation of COMM 150 Video Art Production. Students will further develop their skills in digital video photography scriptwriting, editing, and post-production in iMovie. Students will create short videos in selected genres, such as the biographical narrative, the parody, or community-interest documentary.

Lecture: 4 hours – Lab: 2 hours
Prerequisite: COMM 150 and permission of the instructor
Lab fee: \$25.00

COMM 297-298-299 Special Topics in Communication (On Demand) 1-5 credits

Lecture hours: Vary – Lab hours: Vary
Prerequisite: Varies

Computer Information Technology (CIT)

CIT 089 Introduction to FrontPage (W, SP,–DL) 1 credit

This course introduces the student to Web page creation. The student will create a simple homepage using Microsoft FrontPage. Distance learning students are responsible for the required software.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: CIT 094
Lab fee: \$10.00

CIT 092 Introduction to HTML (A, SU,–DL) 1 credit

Learn the most important topics of HTML, including creating an HTML document; viewing an HTML file in a Web browser; working with tag text elements; inserting special characters, lines, and graphics; creating hypertext links; working with color and images; creating text and graphical tables; using tables to enhance page design; creating and working with frames; and, controlling the behavior of hyperlinks on a page with frames.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: None
Lab fee: \$10.00

CIT 093 Project Management (W, SU) 1 credit

Learn to develop, plan, schedule, and chart project information, and balance workloads for people working on several projects at once, tracking all phases of the project to meet deadlines and stay on budget. Uses Microsoft approved text.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: None
Lab fee: \$10.00

CIT 094 Web Learning Tools (A, W, SP, SU,–DL) 1 credit

This one-credit-hour course provides students with an introduction to Blackboard and to the Internet. Students will learn how to use Blackboard, find information, and explore the World Wide Web. Not open to students who have taken CIT 139.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: None
Lab fee: \$10.00

CIT 095 Computer File Management (A, W, SP, SU) 1 credit

This one-credit-hour course is an introductory course on the Windows operating system. The objective of the course is to teach fundamental skills in working with the desktop, drives, folders, files, and applications. Not open to students who have taken CIT 121.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: None
Lab fee: \$10.00

CIT 100 Computer Literacy (A, W, SP, SU,–DL) 1 credit

This one-credit-hour course provides students with an introduction to computer technology, computer hardware, and computer software.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: None
Lab fee: \$10.00

CIT 101 PC Applications 1 (A, W, SP, SU,–DL) 3 credits

In this course, the student will learn introductory concepts and techniques used in word processing, spreadsheet, database, and presentation graphics

software. Hands-on lab experience using the Windows operating system and Microsoft Office software is emphasized. This course is not designed for beginning computer users. Beginning computer users should take CIT 100 Computer Literacy before taking this course. Recommended: OADM 131. Distance learning students are responsible for the required software.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: DEV 030 and completion of ENGL 100 or ESL 100 or placement into ENGL 101 or 111

Lab fee: \$10.00

CIT 102 PC Applications 2 (A,W, SP, SU,-DL) 3 credits

This course covers advanced concepts and techniques used in word processing, spreadsheet, and database software. Microsoft has approved the textbooks used in CIT 101 and CIT 102, when used in a two-quarter sequence, as courseware for the Microsoft Office Specialist certification. Distance learning students are responsible for the required software.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 101

Lab fee: \$10.00

CIT 102A PC Applications 2 Module 1 (Word) (A, W, SP, SU,-DL) 1 credit

Business-oriented features of Word such as merging letters, merging labels, page layout for newsletters, columns, object linking and embedding, outlines, and Web pages. Not open to students who have completed CIT 102.

Lecture: 0 hours – Lab: 2 hours

Prerequisite: CIT 101

Lab fee: \$10.00

CIT 102B PC Applications 2 Module 2 (Excel) (A, W, SP, SU,-DL) 1 credit

Business-oriented features of Excel such as lists, filters, pivot tables and charts, 3-D formulas, data validation, auditing tools, and IF functions. A bridge course designed to prepare students for CIT 231 Expert Excel. Not open to students who have completed CIT 102.

Lecture: 0 hours – Lab: 2 hours

Prerequisite: CIT 101

Lab fee: \$10.00

CIT 102C PC Applications 2 Module 3 (Access) (A, W, SP, SU,-DL) 1 credit

Business-oriented features of Access such as creating and manipulating forms and form data, creating and manipulating reports and report data, creating complex reports, relating tables, refining table design, using Access database tools, and integrating Access with other applications. A bridge course to prepare students for CIT 233 Expert Access. Not open to students who have completed CIT 102.

Lecture: 0 hours – Lab: 2 hours

Prerequisite: CIT 101

Lab fee: \$10.00

CIT 103 Computer Concepts & Logic (A, W, SP, SU) 3 credits

This course is an introduction to computer information systems, computer concepts, and programming logic. Along with general computing concepts, this course will cover command line interaction, file management, programming logic using pseudo code, flowcharts, and VB.NET.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: MATH 102 and completion of ENGL 100, ESL 100, or placement into ENGL 101

Lab fee: \$15.00

CIT 121 PC Operating Systems (A, W, SP, SU) 3 credits

This course examines common operating systems, from the Windows family to Linux and MAC. The student will also learn about how operating systems interact with networks and hardware. The content of this course is designed to help a student prepare for the software portion of

the CompTIA A+ certification exam.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 103

Lab fee: \$15.00

CIT 123 Workstation Installation/Configuration (A, W, SP)3 credits

This course provides students with the necessary skills and knowledge to identify and perform tasks involved in supporting networks. The course is designed to prepare students to perform essential network administration tasks.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 121

Lab fee: \$20:00

CIT 125 PC Maintenance (W, SU) 3 credits

This course focuses on maintaining, troubleshooting, and upgrading PCs. Discussion emphasizes the analysis and design of PC systems, as well as installation of expansion cards, hard drives, video cards, memory upgrades, loading drivers, disk maintenance, and loading application and system software.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 121

Lab fee: \$15.00

CIT 137 Advanced Information Presentation (A, W, SP, SU) 3 credits

Learn how computer graphics are used to communicate information effectively. Computer lab assignments include chart format and data content. Students will learn how to create effective business presentations complete with graphs, organization charts, graphics, sound, movies, and Web links. Students will research a topic and develop presentations. Uses Microsoft approved text. Covers skill set for PowerPoint Expert certification.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 101

Lab fee: \$15.00

CIT 139 Web Essentials (A, W, SP, SU,-DL) 3 credits

Students will learn the dynamics of the Web environment and explore World Wide Web (WWW) sites. Hands-on experience using the Internet will be emphasized. The midterm and final examinations will be taken in the Testing Center at Columbus State.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 103

Lab fee: \$10.00

CIT 141 Web Publishing (A, W, SP, SU,-DL) 3 credits

This course offers Web page layout, implementation, maintenance, and creation of a recognized presence on the Internet. Hands-on lab experience using the IBM PC and Web development software (MS Front Page) is emphasized. Distance learning students are responsible for the required software.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 139

Lab fee: \$10.00

CIT 145 HTML (A, SP,-DL) 3 credits

This course provides an in-depth study of Hypertext Markup Language and its use in Web pages. Student will receive experience in TCP/IP, HTTP, and HTML in a Web server environment.

Lecture: 2 hours—Lab: 3 hours

Prerequisite: CIT 139

Lab fee: \$15.00

CIT 147 Java Script Fundamentals (W, SU) 3 credits

The course provides an in-depth study of JavaScript and other scripting languages that add interactivity to Web sites. JavaScript is an extension to Hypertext Markup Language (HTML) that enables one to get data stored in Web page forms. With JavaScript, one may make intelligent Web pages that verify input, calculate it, and make presentation decisions based on it.

Students will be introduced to programming concepts, including flowcharting and pseudo code to provide planning logic for programs.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 145

Lab fee: \$15.00

CIT 149 Groupware (W, SU) 3 credits

Intranets, portals, and group work tools that integrate information technology and business and governmental processes are examined. In addition, the student will investigate collaboration software, digital objects management software, and digital search tools that support work system processes. Computing project planning activities tie these tools and activities to any user's computing and messaging devices.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: CIT 101

Lab fee: \$15.00

CIT 151 Networking 1 (A,W, SP, SU) 3 credits

An introductory course to Local Area Networks (LANs). This course will explore the current technology available for LANs including both hardware and software.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 121

Lab fee: \$15.00

CIT 163 Visual Basic 1 (A, W, SP, SU,–DL) 4 credits

Emphasizes the essential aspects of creating the graphical user interface of a Visual Basic Windows program. The student will also learn fundamental aspects of coding a VB.NET program, along with more advanced topics such as manipulating MS Access databases, sequential file processing, error handling, and data validation. Software is provided to students.

Lecture: 2 hours – Lab: 5 hours

Prerequisite: CIT 103

Lab fee: \$15.00

CIT 165 COBOL 1 (On Demand) 3 credits

An introduction to the concepts and techniques of batch COBOL programming using structured programming techniques. Index access methods are stressed.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 163

Lab fee: \$15.00

CIT 167 C++ Programming 1 (A, W, SP, SU) 4 credits

An introductory course in ANSI-Standard C++ Language Programming. Lab problems are targeted towards writing programs with business applications. Computer lab projects will provide hands-on experience in developing programs with an ANSI-Standard C++ compiler environment.

Lecture: 2 hours – Lab: 5 hours

Prerequisite: CIT 103

Lab fee: \$15.00

CIT 169 Java Programming 1 (A, SP) 3 credits

This course is an introduction to the art of computer programming in Java. Included are features needed to construct Java Applets, Java applications, control structures, methods, arrays, character and string manipulation, graphics, and object-oriented programming.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 103

Lab fee: \$15.00

CIT 171 Database Administration/SQL (A, SP) 4 credits

This course provides the student with the necessary skills and knowledge to identify and perform the tasks involved in implementing and managing databases on MS SQL Server.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: CIT 151 and either CIT 233 or CIT 173

Lab fee: \$15.00

CIT 173 Database Programming (A, W, SP) 3 credits

This course presents an overview of Database Management Systems (DBMS) programming techniques and systems. The student will write programs using ORACLE.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 103

Lab fee: \$20.00

CIT 175 Systems Analysis 1 (A, W, SP) 4 credits

An introduction to the fundamentals of traditional and object systems analysis, design, and project management. Emphasis will be placed on the Systems Development Life Cycle (SDLC), various flow diagrams, system requirements, project scheduling and managing analysis, and design activities.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: CIT 103

Lab fee: \$15.00

CIT 200 Certification Test Review (A, W, SP, SU-IS) 1 credit

Students will review topical material to take an industry certification exam relevant to their field of study.

Lecture: 0 hours – Lab: 3 hours

Prerequisite: CIT 175

Lab fee: \$10.00

CIT 225 PC Troubleshooting and Diagnosing (W) 3 credits

This course is a hands-on application of job skills necessary in the PC Help Desk, PC Support, and PC Bench Technician fields.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: CIT 121 and 125

Lab fee: \$15.00

CIT 231 Expert Excel (A, SP,–DL) 3 credits

Advanced features and formats in the spreadsheet application MS Excel with an emphasis placed on VB application. Uses Microsoft approved text. Covers skill set for Microsoft Expert certification. Distance learning students are responsible for the required software.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: CIT 102 or 102B and MATH 102

Lab fee: \$15.00

CIT 233 Expert Access (A, W, SP, SU,–DL) 3 credits

A continuation from CIT 102 presenting database software, including file creation, screen and report generators. Emphasis is placed on VB applications. Uses Microsoft approved text. Covers skill sets for Access Expert certification.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: CIT 102 or 102C and MATH 102

Lab fee: \$15.00

CIT 250 Network Communication Systems (A, W, SP, SU,–DL) 3 credits

Students will learn the fundamentals of data communication and computer networks. Course includes basic communication theory as applied to both digital and analog communication networks. Students will also learn the basics of the OSI layered network model and characteristics of the wide area and local area data communication networks.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 151

Lab fee: \$10.00

CIT 251 Networking 2 (A, SP) 3 credits

A continuation of CIT 151. Students will learn advanced local area network concepts and how they can be applied to support enterprise-wide information management of a large organization. The student will learn to install and use a LAN operating system.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 151

CIT 252 Enterprise Networking (W, SP) 4 credits
A continuation of CIT 251. Students will learn to use the Microsoft Windows Server environment to support small and enterprise wide information management systems. Students will complete a series of laboratory assignments using the Windows Server environment.
Lecture: 2 hours – Lab: 4 hours
Prerequisite: CIT 251
Lab fee: \$10.00

CIT 253 TCP/IP (SP, AU,–DL) 3 credits
This course demonstrates the concepts and analyzes the results using utilities provided by Windows. The course covers the aspects of TCP/IP such as history, client/server model, addressing, bridging, and routing/DHCP, Windows domains, and name services.
Lecture: 2 hours - Lab: 3 hours
Prerequisite: CIT 252
Lab fee: \$10.00

CIT 255 Server Administration I (AU) 4 credits
Students will learn how to perform administration tasks using MS Windows networks. Elements include management of data storage, monitoring event logs, designing and administering Windows security model, and designing and developing a security needs analysis. The student will also utilize the client and server technologies used in designing and implementing Web services such as network address translators, proxy servers, firewalls, and Internet Information Services.
Lecture: 2 hours – Lab: 5 hours
Prerequisite: CIT 252
Lab fee: \$10.00

CIT 257 Network Security (W) 3 credits
This course focuses on the underlying theory of computer security by covering topics such as e-security, cryptography, security architecture and management, laws and ethics, telecommunications, network and Internet security, risk assessment and auditing, and firewalls.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 255
Lab fee: \$10.00

CIT 258 Wireless Networking (SP) 3 credits
This course is designed to provide students and network administrators with an in-depth knowledge of wireless LAN basics including IEEE 802.11, Wi-Fi, Bluetooth, WiMax technologies, encryption techniques, site surveys, securing, troubleshooting, monitoring, and managing wireless LANs, while preparing the students for CWNA certification.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 255
Lab fee: \$25.00

CIT 259 Advanced Network Security (On Demand) 3 credits
This course is designed to introduce students and network administrators to comprehensive and advanced topics related to network security. This course is an extension to the Network Security course and includes concepts related to network firewall security, intrusion detection techniques, VPNs, IP security, installation and troubleshooting firewall technology while preparing the student for an industry-standard certification.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 257
Lab fee: \$25.00

CIT 260 Web Security (On Demand) 3 credits
This course is designed for students, Web developers, and network administrators who want to gain knowledge related to Internet/Intranet security while learning how to protect Web sites from internal and external threats. This course will teach students about the concepts and techniques related to securing Web sites while exploring common vulnerabilities of Web sites as well as implementing secure communications across unsecured networks. Students gain hands-on experience implementing Web security

using a network server-based operating system.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 259
Lab fee: \$25.00

CIT 263 Visual Basic 2 (W, SP,–DL) 4 credits
A continuation of CIT 163. Emphasizes advanced topics in VB.NET such as database programming, including SQL, Active X controls, and object-oriented programming. Software is provided to students.
Lecture: 2 hours – Lab: 5 hours
Prerequisite: CIT 163
Lab fee: \$15.00

CIT 264 Visual Basic 3 (AU) 4 credits
A continuation of CIT 263, Visual Basic 2. Emphasis is on advanced topics, including deploying Web forms that utilize a database. Advanced features of Visual Studio.NET are explored and applied as they relate to connectivity with SQL Server, Oracle, and other databases.
Lecture: 2 hours – Lab: 5 hours
Prerequisite: CIT 263
Lab fee: \$15.00

CIT 265 COBOL 2 (On Demand) 3 credits
A continuation of CIT 165. Sort procedures, sequential access, table handling, and SQL with COBOL are stressed.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 165
Lab fee: \$15.00

CIT 266 Interactive COBOL (On Demand,–DL) 3 credits
Interactive programming using applicable software.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 165
Lab fee: \$15.00

CIT 267 C++ Programming 2 (A, SP) 4 credits
An advanced course in ANSI-Standard C++ Language programming. Lab problems are targeted towards writing programs that explore data structures using object-oriented techniques. Computer lab projects will provide further hands-on experience in developing programs with an ANSI-Standard C++ compiler environment including debugging techniques.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 167
Lab fee: \$15.00

CIT 268 Object-Oriented COBOL (On Demand,–DL) 3 credits
An introduction to object-oriented COBOL using classes and objects. Object analysis and object design concepts are introduced for COBOL programming. Programs written are runnable on personal computers using an ANSI-standard COBOL compiler.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 163
Lab fee: \$15.00

CIT 269 Java Programming 2 (W, SU) 3 credits
This course is a continuation of Java Programming 1. More advanced work in Java applets, applications, structures, methods, and arrays will be included.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: CIT 169
Lab fee: \$15.00

CIT 270 Advanced Web Programming (A, SP) 4 credits
This course focuses on using the Common Gateway Interface (CGI) and Active Server Pages (ASP) to create dynamic, interactive Web content. Both Perl and VBScript are taught in this course. Although no prior experience with either programming language is required, students are expected to understand basic programming concepts. Practical, real-world

lab exercises provide students with hands-on experience, including working with the Apache Web Server and Microsoft Personal Web Server.

Lecture: 2 hours – Lab: 5 hours

Prerequisite: CIT 147

Lab fee: \$15.00

CIT 271 Data Mining and Warehousing (W, SU) 4 credits

This course provides students with the necessary skills and knowledge to design and develop relational databases and provides an introduction to data mining and data warehousing concepts.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: CIT 171

Lab fee: \$15.00

CIT 273 Database Systems (W, SU) 3 credits

An introduction to database systems in theory and application. Students will design and build a database on IBM personal computers using ORACLE.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 173

Lab fee: \$20.00

CIT 275 Systems Analysis 2 (SP) 4 credits

Students will use techniques learned in Systems Analysis 1 to produce various flow diagrams, project schedules, and timetables. Exploration of object-oriented design and unified modeling language (UML). Students will work in teams to learn to prepare and present a systems proposal and how to implement and complete a software project.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: CIT 175

Lab fee: \$15.00

CIT 276 Information Security Audit (On Demand) 3 credits

This course is designed for students, web developers, and network administrators who want to gain knowledge related to information and database security focusing on the areas of security, auditing, and implementation.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 259

Lab fee: \$25.00

CIT 277 Computer Forensics (On Demand) 3 credits

This course is designed for students and systems administrators involved in responding to security incidents and applying computer forensics skills. This course focuses on the latest technologies in computer forensics techniques in order to recognize and respond to security threats.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 259

Lab fee: \$25.00

CIT 278 Business Continuity and Disaster Recovery (On Demand) 3 credits

This course is designed for students and network administrators who need to obtain knowledge and experience for disaster recovery. This course will provide methods used to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. This course takes an enterprise-wide approach to developing a disaster recovery plan.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 276

Lab fee: \$25.00

CIT 280 ACP Examination (A, SP) 1 credit

Students will review topics covered in all previous technical courses. Students will be eligible to take the Associate Computer Professional (ACP) examination administered by the Institute for the Certification of Computer Professionals (ICCP). All software developer students in Computer Information Technology will take CIT 280 during their graduating quarter.

Lecture: 0 hours – Lab: 3 hours

Prerequisite:

Lab fee: \$40.00

CIT 281 Capstone for Software Developer (AU, SP) 5 credits

In this capstone course, software developer majors will work in assigned groups to convert a manual business process to a computer-based solution. Using project management techniques, students will design, present, and program their solution using a Web user interface and database technology. Emphasis will be placed on the ability to demonstrate technical expertise and software skills required for employment.

Lecture: 2 hours – Lab: 8 hours

Prerequisites: CIT 263 and CIT 275

Lab fee: \$30.00

CIT 282 Capstone for Net Admin/User Support/Web Dev (A, SP) 5 credits

This is the capstone course for the User Support, Networking Administrator, and Web Developer tracks. Students will work in small groups or individually to design and develop a typical business system. Students in the Software Developer track take CIT 281.

Lecture: 2 hours – Lab: 8 hours

Prerequisites: See table

Lab fee: \$30.00

User Support	Networking Tech.	Web Dev.
CIT 125	CIT 123	CIT 141
CIT 135	CIT 253	CIT 169
CIT 137	CIT 255	CIT 233
CIT 139	CIT 271	CIT 270
CIT 151		
CIT 175		

CIT 291 Special Topics in CIT 1 (On Demand) 1-5 credits

CIT 292 Special Topics in CIT 2 (On Demand) 1-5 credits

CIT 293 Special Topics in CIT 3 (On Demand) 1-5 credits

CIT 294 Special Topics in CIT 4 (On Demand) 1-5 credits

CIT 295 Special Topics in CIT 5 (On Demand) 1-5 credits

CIT 296 Special Topics in CIT 6 (On Demand) 1-5 credits

Special Topics in CIT is a series of courses specifically designed to meet the needs of the constantly changing business community and student population. Courses will be designed with the advice of the particular group requesting the course and approval by the department chairperson.

Lecture: 0 hours – Lab: 1-5 hours

Lab fee: \$5.00

CIT 297 CIT Internship/Field Experience 1 (On Demand) 1 credit

The student works 12 hours per week in an activity that relates to the student's occupational objective.

Lecture: 0 hours – Lab: 12 hours

CIT 298 CIT Internship/Field Experience 2 (On Demand) 2 credits

The student works 24 hours per week in an activity that relates to the student's occupational objective.

Lecture: 0 hours – Lab: 24 hours

CIT 299 CIT Internship/Field Experience 3 (On Demand) 3 credits

The student works 36 hours per week in an activity that relates to the student's occupational objective.

Lecture: 0 hours – Lab: 36 hours

Construction Management (CMGT)

CMGT 101 Managing a Construction Company (A, W, SP) 3 credits

An overview of the operations and management of a construction firm. Emphasis is placed upon construction management firm organization, roles and responsibilities of construction industry participants, accounting and cash flow, analysis of general management techniques, and ethics and professionalism. Students will create a sound business plan in order to better understand what it takes to be successful in the construction industry.

Lecture: 2 hours – Lab: 3 hours
Lab fee: \$5.00

CMGT 105 Construction Contract Documents (A, W, SP, SU) 3 credits

A study of construction industry documents as they relate to a construction project. Emphasis is placed upon legal aspects of documents, roles of design professionals, contractors, and owners; utilization and effects of construction documents; procurement of construction services; assembly of a project manual; specifications formatting; drawing and specifications coordination; submittals and project closeout. Standard forms, ethics, bonding, CSI MasterFormat, and credentialing will also be examined.

Lecture: 2 hours – Lab: 3 hours
Lab fee: \$5.00

CMGT 106 Supervision of Field Operations (W, SP) 3 credits

An overview of the principles of construction industry field operations and supervision. Emphasis is placed upon field supervision, revealing the importance of and insights into the complex and responsible task of managing people. Various phases of proper management will be discussed such as understanding employee behavior, boosting productivity, communicating effectively with employees, ethics and professionalism, handling discipline problems, sexual harassment and discrimination, planning and organizing, making and implementing decisions, solving problems, reducing costs and improving safety.

Lecture: 2 hours – Lab: 3 hours
Lab fee: \$4.00

CMGT 115 Building Construction Methods (A, W) 3 credit

A presentation on the technical operations, methods, and operational sequences used in the construction of a modern commercial building. The content will be provided so the student understands the sequence of construction operations in the field. The students will also understand the rationale for, and the sequential nature of, the building construction process.

Lecture: 2 hours – Lab: 3 hours
Lab fee: \$3.00

CMGT 121 Building Construction Drawings (A, W, SP, SU) 3 credits

A study of reading and interpreting building construction working drawings and project manuals, as related to residential, commercial and industrial construction. Emphasis is placed upon drawing organization; relationship of plan, section, and elevation; coordination of the drawings and specifications; shop drawings and submittals; graphic symbols and interpretation skills; and construction mathematics required for the use building drawings.

Lecture: 2 hours – Lab: 3 hours
Prerequisites: MATH 102 or instructor permission
Lab fee: \$20.00

CMGT 131 Construction Quantity Survey (A, W, SP, SU) 3 credits

Development of the use of construction math relative to linear, area and volumetric measures of common construction materials. The computation and organization of basic material quantities used in a typical building construction project including site preparation work.

Lecture: 1 hour – Lab: 4 hours
Prerequisite: CMGT 115, 121 or higher or permission of instructor
Lab fee: \$15.00

CMGT 135 Safety and Loss Prevention (W, SP) 3 credits

An introduction to materials covering the expanding concerns of construction safety and loss prevention. Emphasis will be placed upon identification of work hazards and unsafe practices; supervisory safety and loss prevention techniques to minimize loss in productivity and resources; OSHA and Ohio BWC as safety resources; creation of a safety plan; the profitability of safety and loss prevention; and the creation and promotion of an ethical and pro-active safety culture in the construction workplace.

Lecture: 2 hours – Lab: 3 hours
Lab fee: \$7.00

CMGT 141 Building Estimating (SP, SU) 3 credits

A study of the current manual practices of estimating skills and methods utilized to create project estimates. Emphasis will be placed upon preparation of estimates for typical commercial building projects; incorporating drawing interpretation, quantity survey, and construction methods in estimate creation; and calculating the time, cost, and effort in the form of crew size for the various tasks involved with a construction project.

Lecture: 2 hours – Lab: 3 hours
Prerequisite: CMGT 131 or permission of instructor
Lab fee: \$9.00

CMGT 231 Computer Estimating Buildings (W, SU) 3 credits

A comprehensive study of the skills required to “take-off” the amount of materials from a set of construction plans in an orderly manner and arrive at a final price utilizing computer software. The course develops the general background information and bidding strategies to be used for estimating a commercial construction project.

Lecture: 2 hours – Lab: 3 hours
Prerequisite: CMGT 131 or permission of instructor
Lab fee: \$20.00

CMGT 241 Planning and Scheduling (A, SU) 3 credits

A study of the management and coordination of construction projects utilizing systematic planning and scheduling. Local and global construction industry methods and techniques will be reviewed and practiced in simulated projects. Topics include: WBS (Work Breakdown Structure), PDM (precedence diagram method), and the manual calculations involved with CPM (Critical Path Method) scheduling. The student will learn fundamental skills to develop, analyze, and manage construction projects utilizing several scheduling methods. Fundamental course work will be supplemented with the use of Primavera Project Planner (P3) software.

Lecture: 2 hours – Lab: 3 hours
Prerequisites: CMGT 131 or permission of instructor
Lab fee: \$10.00

CMGT 251 Construction Cost Controls (A, W) 3 credits

Various methods and techniques used by construction professionals for predicting and analyzing cost performance are presented. The student will learn how to implement cost reduction strategies, monitor field performance, and develop cost databases for estimating future work. This format will provide the student exposure to various types of schedules and projects, as well as assist in the understanding of the concepts and methods used for cost control and monitoring construction project progress.

Lecture: 2 hours – Lab: 3 hours
Prerequisite: CMGT 241
Lab fee: \$10.00

CMGT 252 Construction Law (A, W) 3 credits

An intensive study of the legal aspects and characteristics unique to the construction industry. Students review typical legal problems which arise in the day-to-day business of construction. Emphasis is placed upon bidding process and laws; contracts, sub-contracts, and supply contracts; labor laws and issues, insurance and bonding; lien laws, dispute resolution, and remedies; and ethical behavior in the construction industry.

Lecture: 2 hours – Lab: 3 hours
Prerequisite: CMGT 105 or permission of instructor
Lab fee: \$5.00

CMGT 253 Residential Construction (A, W, SU) 3 credits

A presentation and overview of residential construction. Emphasis will be placed upon home construction methods and field operations; structural design elements; terminology, materials and equipment used; and an understanding of the sequential nature of the residential construction process.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$2.00

CMGT 261 Project Management (W, SP) 3 credits

This Capstone Experience provides student the opportunity to demonstrate, present, and simulate methods and techniques used to obtain and manage a construction project. The methods and techniques studied include project marketing, obtaining financing, start-up, schedule development, control structures, organizational forms, subcontractor and vendor coordination, schedule adjustment, shop drawing coordination, move-out/shut-down phase, and correspondence and tracking techniques. Some computer simulations will be used to demonstrate project management activities and processes. Student teams are selected jointly by the students and approved by the instructor to prepare for and simulate the process of obtaining financing, marketing/sales, management and some field operational concerns by the project management teams. This information shall be organized by the teams and presented as if making a presentation to a potential customer as a final exercise for the course.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CMGT 251

Lab fee: \$10.00

CMGT 281 Computer Estimating Residential (A, SP) 3 credits

A comprehensive study of the skills required to take-off the amount of materials from a set of residential construction plans in an orderly and effective manner and arrive at a cost for construction. The course will develop the general background information for the process of bidding/pricing a residential construction project utilizing estimating software.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CMGT 131 or permission of instructor

Lab Fee: \$20.00

CMGT 282 Sustainable Construction (On Demand) 3 credits

This course is an intense study of building documents, construction materials and methods, and the sales and marketing of construction management services as they apply to sustainable building of various types of new construction and existing facilities. Prior course work (ENVR 282) and/or field experience is essential, as this course will not be a review of conventional documents, methods, and estimating concepts.

Lecture: 1 hour – Lab: 3 hours

Prerequisites: ENVR 282 or permission of instructor

Lab Fee: \$10.00

CMGT 291 Field Experience (SU) 4 credits

Off-campus work experience in construction, consulting engineering or some construction related industry that augments the formal education received in the technology with actual work conditions and job experience. "N" credit will not be allowed for this course.

Lecture: 0 hours – Lab: 48 hours

Lab fee: \$15.00

CMGT 299 Special Topics in Construction Management (On Demand) 1 - 5 credits

This course provides the student and instructor flexibility to allow for special topics in the construction industry to be presented.

Lecture and Lab hours vary dependent upon topic

Prerequisite: Varies depending upon topic

Lab Fee: \$10.00

Dance (DANC)

All studio classes are held at Ballet Met, 322 Mount Vernon Ave.

DANC 101 Classical Ballet I (A, W, SP) 2 credits

Classical ballet at the beginning level. Fundamentals of classical ballet technique, coordination, strength and flexibility with an emphasis on proper execution and comprehension. Repeatable for up to 6 total credits.

Lecture: 1 hours – Lab: 2 hours

Lab fee: \$8.00

DANC 102 Classical Ballet II (A, W, SP) 2 credits

A continuation of Classical Ballet I, following through on the development of basic skills and their incorporation into combinations of movements. Repeatable for up to 6 total credits.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: 6 hours of Ballet I or permission of instructor

Lab fee: \$8.00

DANC 121 Beginning Tap I (A, W, SP) 1 credit

Tap techniques at the beginning level. Tap classes emphasize precession in sound, rhythm, movement, gesture and expression. Repeatable for up to 3 total credits.

Lecture: hours – Lab: 2 hours

Lab fee: \$8.00

DANC 122 Beginning Tap II (A, W, SP) 1 credit

Fundamentals of tap developed to include more complex movement combinations and interpretations. Emphasis on quick and efficient learning skills. Repeatable for up to 3 total credits.

Lecture: hours – Lab: 2 hours

Prerequisite: 6 hours of Tap I or permission of instructor

Lab fee: \$8.00

DANC 131 Beginning Jazz I (A, W, SP) 1 credit

Jazz dance techniques at the beginning level. Jazz classes combine classic Broadway theatre dance with contemporary movement styles, elementary body part isolations, and basic combinations. Repeatable for up to 3 total credits.

Lab: 2 hours

Lab fee: \$8.00

DANC 132 Beginning Jazz II (A, W, SP) 1 credit

Fundamentals of Jazz dance developed to include more complex movements combinations, and interpretations. Repeatable for up to 3 total credits.

Lab: 2 hours

Prerequisite: 6 hours of Jazz I or permission of instructor.

Lab fee: \$8.00

DANC 150 Afro-Caribbean/Jazz Dance I (On Demand) 2 credits

Students will learn basic ethnic dance history and vocabulary in the context of the wider social and cultural movements. They will also learn and practice dance movements in the studio.

Lecture: 1 hours – Lab: 2 hours

Lab fee: \$8.00

DANC 151 Afro-Caribbean/Jazz Dance II (On Demand) 1 credit

Continuation of the studio portion of DANC 150. Repeatable for up to 3 total credits.

Lab: 2 hours

Prerequisite: DANC 150 or permission of instructor

Lab fee: \$8.00

DANC 299 Special Topics in Dance (On Demand) 1-5 credits

Examination of types and styles of dance other than those regularly offered.

Lecture hours vary – Lab hours vary

Lab fee: \$8.00

Dental Hygiene (DHY)

DHY 101 Preventive Concepts I (A) **1 credit**
This course involves the introduction to the concepts of individualized oral hygiene instruction.
Lecture: 1 hour – Lab: 0 hours
Prerequisite: Admission to Dental Hygiene Program

DHY 102 Preventive Concepts II (W) **1 credit**
This course is an introduction to the concepts and principles of instrumentation techniques.
Lecture: 1 hour – Lab: 0 hours
Prerequisite: DHY 101

DHY 103 Techniques I (SP) **1.5 credits**
This 1.5 credit-hour lecture course is designed to expand the student's knowledge of dental hygiene practice including ultrasonic instrumentation, instrument sharpening, treatment planning, dental charting and care of the special needs patient.
Lecture: 1.5 hour – Lab: 0 hours
Prerequisite: DHY 110

DHY 110 Introduction to Dental Hygiene (A) **4 credits**
This four credit-hour course is designed to acquaint the dental hygiene student with the role of the dental hygienist and provide background knowledge, information, and the necessary foundation required for subsequent didactic and clinical dental hygiene course work. Observation sessions at The Ohio State University College of Dentistry are included to acquaint and orient the students to the clinical setting.
Lecture: 3 hours – Lab: 2 hours
Prerequisite: Admission to Dental Hygiene Program
Lab fee: \$60.00

DHY 120 Dental Hygiene Pre-Clinic (W) **4 credits**
This four-credit, 12-contact-hour clinical course is designed to apply the basic principles of instrumentation, instrument design, instrument utilization, and fundamental clinical dental hygiene skills. The method of evaluation is competency-based and guided by mastery of skills.
Lecture: 0 hours – Lab: 12 hours
Prerequisite: DHY 110
Lab fee: \$300.00

DHY 121 Dental Hygiene Clinic I (SP) **4 credits**
This four-credit, 12-contact-hour clinical course continues the clinical experience of total patient care emphasizing instrumentation skills, radiographic techniques, patient education, periodontal charting, and calculus detection.
Lecture: 0 hours – Lab 12 hours
Prerequisite: DHY 110
Lab fee: \$300.00

DHY 130 Dental Radiography (W) **3 credits**
This three credit-hour lecture course provides the fundamental theory for safe and effective use of radiography as it relates to dentistry. It encompasses history, production and uses of radiation; film exposure; operation techniques for exposure; and radiographic interpretation.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: DHY 110

DHY 135 Dental Radiography Laboratory (W) **1 credit**
This one-credit, three-contact-hour laboratory course places emphasis on proficiency in exposing and developing diagnostically acceptable dental radiographs. The course provides experience in the use of x-ray equipment, exposure projections and techniques, processing, mounting and evaluation of radiographs.
Lecture: 0 hours – Lab: 3 hours
Prerequisite: DHY 110
Lab fee: \$75.00

DHY 140 Head and Neck Anatomy/Tooth Morphology (A) **3 credits**
This three credit-hour course includes the study of skeletal, muscular, circulatory, nervous and glandular structures of the head, neck and oral cavity. The study of anatomy and morphology of the head and soft tissues of the oral cavity will also be included in this course.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Admission to Dental Hygiene program

DHY 145 Head and Neck Anatomy/Tooth Morphology Lab (A) **1 credit**
This one-credit, three-contact-hour course involves the identification and reproduction of teeth and orofacial structures, morphology of hard and soft tissues of the oral cavity and head and neck, with special emphasis on clinical application.
Lecture: 0 hours – Lab: 3 hours
Prerequisite: Admission to Dental Hygiene Program
Lab fee: \$175.00

DHY 204 Techniques II (SU) **1.5 credits**
This one-hour lecture course is designed to introduce the foundational theories and clinical techniques of root planning in relation to periodontal therapy and advanced instrumentation techniques. In addition, instruction will be provided on the practical aspects of nutritional need of the dental patient and nutritional counseling.
Lecture: 1 hour – Lab: 0 hours
Prerequisite: DHY 110

DHY 205 Techniques III (A) **2 credits**
This two-credit hour lecture course is designed to provide knowledge and understanding regarding dental hygiene care and management for patients with special needs, including but not limited to, pediatrics, geriatrics and the handicapped.
Lecture: 2 hour – Lab: 0 hours
Prerequisite: DHY 110

DHY 206 Techniques IV (W) **1.0 credit**
This one-credit-hour lecture course is designed to introduce the foundational principles of enhanced therapeutics for nonperiodontal therapy, instrument management, expanded functions, licensure requirements, and advanced computer technology enhancement for dental practices. Dental forensics and other emerging professional issues in dental hygiene will be discussed.
Lecture: 1 hour – Lab: 0 hours
Prerequisite: DHY 110

DHY 207 Techniques V (SP) **1.0 credit**
This lecture course is designed to provide the student with knowledge of professional ethics, legal responsibilities of the dental hygienist, and the role of organized dental hygiene. In addition, office management skills, alternate practice settings and securing employment will be emphasized. The student will create a Dental Hygiene Portfolio including a prepared resume.
Lecture: 1 hour – Lab: 0 hours
Prerequisite: DHY 110

DHY 214 Dental Hygiene Treatment Planning (SP) **0.5 credits**
This 0.5 credit-hour course introduces the philosophy and techniques of treatment planning and provides the student with an opportunity to apply the principles of treatment planning.
Lecture: 0 hours – Lab: 1.5 hour
Prerequisite: DHY 110

DHY 215 Case Studies and Presentations (SP) **0.5 credits**
This 0.5 credit-hour course provides the student with the opportunity to assess, plan, implement and evaluate a complete patient case study. The student will present a 30-minute oral report on each case study.

Lecture: 0 hours – Lab: 1.5 hour
Prerequisite: DHY 110

DHY 220 Dental Hygiene Clinic II (SU) 4 credits

This four credit-hour, 12-contact-hour clinical course continues clinical experience of total patient care, instrumentation skills, radiographic techniques, patient education, assessment, and treatment planning. In addition, new treatment modes will include alginate impression, nutritional counseling and the introduction to ultrasonic scaling, root planning, Intraoral photography and topical fluoride application.

Lecture: 0 hours – Lab: 12 hours

Prerequisite: DHY 110

Lab fee: \$300.00

DHY 221 Dental Hygiene Clinic III (A) 4 credits

This four-credit-hour, 12-contact-hour clinical course builds upon previous clinical course work involving dental hygiene total patient care. The course will expand student knowledge in instrumentation skills, radiographic techniques, patient education assessment and treatment planning, sealant placement, alginate impressions, amalgam polishing, study casts, periodontal therapies and NERB calculus detection.

Lecture: 0 hours – Lab: 12 hours

Prerequisite: DHY 110

Lab fee: \$300.00

DHY 222 Dental Hygiene Clinic IV (W) 4 credits

This four-credit-hour, 12-contact-hour clinical course will provide ongoing experience in total patient care. Treatment parameters from previous clinic course work will be increased to include expanded function duties as well as intraoral imaging, alginate impressions, and NERB calculus detection.

Lecture: 0 hours – Lab: 12 hours

Prerequisite: DHY 110

Lab fee: \$300.00

DHY 223 Dental Hygiene Clinic V (SP) 1 to 4 credits

This four-credit-hour, 12-contact-hour clinical course is the final course in the clinical dental hygiene sequence. It is designed to enable the student to incorporate all the techniques and treatment modalities previously acquired involving total patient care. Emphasis will be placed on refinement of treatment, professional decision making, case study presentation, intraoral imaging and peer teaching.

Lecture: 0 hours – Lab: 12 hours

Prerequisite: DHY 110

Lab fee: \$300.00

DHY 240 Dental Materials (SU) 1 credit

This two-hour lecture course is designed to study the chemical, physical and biological properties of materials used in dentistry. Emphasis will be placed on the manipulation and utilization of materials that have application to the dental hygienist.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: DHY 110

DHY 245 Dental Materials Laboratory (SU) 1 credit

This one-credit, three-hour laboratory course places emphasis on the manipulative techniques and practical application of various materials used in the practice of dentistry.

Lecture: 0 hours – Lab: 3 hours

Prerequisite: DHY 110

Lab fee: \$150.00

DHY 250 Oral Histology (A) 1 credit

This one-credit-hour course involves the study of tissues comprising the oral cavity, along with the embryonic development of these tissue and facial structures.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: DHY 110

DHY 251 Oral Pathology (SU) 3 credits

This three-credit-hour course involves the study of oral pathology with emphasis placed upon the recognition of normal and abnormal conditions.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: DHY 110

DHY 260 Periodontology (W) 3 credits

This three-hour lecture course is designed to place emphasis on the etiology, assessment, evaluation, classification, treatment and maintenance of the periodontally involved dental patient.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: DHY 110

DHY 270 Dental Pharmacology (A) 2 credits

This two-hour lecture course surveys the drugs commonly encountered in the dental office. Emphasis is given to drugs and drug actions which can affect dental treatment.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: DHY 110

DHY 275 Dental Hygiene in Review (W) 0.5 credits

This 0.5 credit lab course is a comprehensive review of dental hygiene courses to aid students in the preparation for both clinical and written examinations for licensure.

Lecture: 0 hours – Lab: 1.5 hours

Prerequisite: DHY 110

DHY 282 Biostatistics and Research for the Dental Hygienist (SP,-DL) 1 credit

This lecture course introduces the student to biostatistics, dental indices and research methods in dentistry.

Lecture: 1.5 hours – Lab: 0 hours

Prerequisite: DHY 110

DHY 283 Community Dental Health I (SP) 1 credit

This one hour lecture course introduces the philosophy, techniques, attitudes and behaviors necessary to promote oral disease prevention through organized community-based programs. The student will be responsible for completing and presenting an oral health prevention or health promotion lesson plan.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: DHY 110

DHY 284 Community Dental Health II (W) 2 credits

This two hour lecture course introduces the dental hygiene student to public health concepts and principles. The student will be introduced to their roles and responsibilities as a community health educator.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: DHY 283

DHY 285 Community Dental Health III (SP) 1 credit

This one credit laboratory course is designed to provide the student with the opportunity to apply the principles of public and community dental health in a practical setting. Projects that involve needs assessment, planning, implementation, and evaluation of public dental health programs will be included.

Lecture: 0 hours – Lab: 3 hours

Prerequisite: DHY 284

Lab fee: \$40.00

DHY 290 Pain Control Management (A) 1.5 credits

This course provides the basic concepts of local anesthesia and pain control. The rationale for pain control, a review of specific anatomic landmarks, physiological aspects and the pharmacology of anesthetic agents will be included. Detailed instruction in the local anesthesia techniques and nitrous oxide analgesia administration will be provided. Prevention and management of complications in relation to pain control will be discussed.

Lecture: 1.5 hours – Lab: 0 hours
Prerequisite: DHY 140
Corequisites: DHY 270, DHY 295

DHY 295 Pain Control Management Lab 1 credit

This laboratory course will provide clinical instruction for the dental hygiene students in relationship to pain control techniques. Detailed instruction and demonstration for local anesthesia techniques, nitrous oxide monitoring and pain control management will be provided. Students are required to participate in partner injections and pain control.

Lecture : 0 hours – Lab: 3 hours
Prerequisite: DHY 145
Corequisites: DHY 270, DHY 290
Lab Fee: \$200.00

Dental Laboratory (DENT)

DENT 101 Materials I (A) 3 credits

This course involves a comprehensive study of the chemical and physical properties of materials used by the dental technician.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: Acceptance into program

DENT 111 Anatomy (A, DL) 3 credits

This course provides the student with an introduction to the masticatory system. The student will be exposed to the significant structures and landmarks of the oral cavity, with extensive study of the permanent dentition.

Lecture: 2 hours – Lab: 3 hours
Prerequisite: Acceptance into program

DENT 121 Complete Dentures I (A, DL) 3 credits

This course involves an introduction to complete dentures and includes a study of the procedures from preliminary impressions through wax contouring, with special emphasis upon artificial tooth arrangement.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program
Lab fee: \$65.00

DENT 122 Complete Dentures II (W) 2 credits

This course is a continuation of the study of complete dentures and includes procedural material from flasking through patient remount and occlusal adjustments.

Lecture: 1 hour – Lab: 3 hours
Prerequisite: Acceptance into program
Lab Fee: \$65.00

DENT 123 Complete Dentures III (SP) 3 credits

This course involves a study of procedures required to solve specific post insertion problems, e.g., repair, rebase, and relines. In addition, the student is introduced to the immediate denture technique.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program
Lab fee : None

DENT 132 Occlusion (A,-DL) 3 credits

This course will entail a study of occlusal morphology, the temporomandibular joint and mandibular movements.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program

DENT 142 Removable Partial Dentures I (W) 3 credits

This course is a basic study of removable partial dentures and presents principles such as survey, design, and fabrication.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program

DENT 143 Removable Partial Dentures II (SP) 2 credits

This course will involve an intensification of the study of survey, design and fabrication of removable partial dentures.

Lecture: 1 hour – Lab: 3 hours
Prerequisite: Acceptance into program

DENT 153 Fixed Partial Dentures I (W,-DL) 3 credits

This course will introduce the student to the fixed appliance. The content will be limited to the single unit crown.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program
Lab fee: \$65.00

DENT 224 Complete Dentures IV (SU) 2 credits

In this course, the student will fabricate an overdenture and will concentrate upon characterization of complete dentures.

Lecture: 1 hour – Lab: 3 hours
Prerequisite: Acceptance into program
Lab fee: None

DENT 244 Removable Partial Dentures III (SP) 3 credits

During this course, the student will apply acquired knowledge and skills by fabrication of removable partial dentures. The didactic portion will encompass the specialized designs such as stressbreakers, precision attachments and the RPI technique.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program

DENT 256 Fixed Partial Dentures IV (SP) 3 credits

This course will involve a study of crown and bridge cases not covered previously, as well as the use of attachments. The student will construct multiple unit appliances and construct one piece castings.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program
Lab fee: None

DENT 275 Ceramics I (W,-DL) 4 credits

This course is an introduction to dental ceramics and will involve a study of porcelain fused to metal restorations. The students will construct porcelain veneers and full coverage single unit crowns.

Lecture: 2 hours – Lab: 4 hours
Prerequisite: Acceptance into program
Lab Fee: None

DENT 276 Ceramics II (SP) 3 credits

This unit will entail a continuation of the study of the porcelain fused to metal restoration. It will also include the study of the Maryland bridge and the porcelain jacket crown and other multiple unit appliances.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program
Lab Fee: None

DENT 285 Orthodontics (SP) 2 credits

This course provides a basic introduction to the laboratory skills necessary to provide services in the areas of orthodontics.

Lecture: 1 hour – Lab: 3 hours

DENT 296 Applied Laboratory I (SP) 3 credits

This course consists of laboratory and is intended to simulate a working laboratory. The student will fabricate fixed and removable appliances.

Lecture: 1 hour – Lab: 6 hours
Prerequisite: Acceptance into program
Lab fee: \$65.00

DENT 297 Applied Laboratory II (SU) 7 credits

This course consists entirely of laboratory and is intended to stimulate a working laboratory situation with regard to work schedules, case flow,

and coping with real problems.
Lecture: 1 hour – Lab: 18 hours
Prerequisite: Acceptance into program
Lab fee: \$75.00

Developmental Education Department (DEV)

DEV 006 Basic Grammar Skills (A, W, SP, SU,–DL) 2 credits
This course covers grammar skills including the correct use of verb tenses and forms; simple, compound, and complex sentences; fragments, run-ons, and comma splices. Traditional and Web-based sections are available.
Lecture: 2 hours – Lab: 0 hours
Lab fee: \$2.00

DEV 007 Basic Punctuation Skills (A, W, SP, SU,–DL) 2 credits
This course covers punctuation skills including the correct use of commas, semicolons, quotation marks, apostrophes, and other marks. Traditional and Web-based sections are available.
Lecture: 2 hours – Lab: 0 hours
Lab fee: \$2.00

DEV 015 Spelling and Vocabulary (A, W, SP, SU) 3 credits
This course is designed to improve vocabulary and spelling skills through the use of memorization, phonics, the application of rules, and personal word lists.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$2.00

DEV 028 Algebra Foundations (A, W, SP, SU) 3 credits
This course is designed for students who need special assistance to **re-enter** DEV 031–Pre-Algebra. The course is structured to develop students' critical thinking and problem solving in relation to basic algebra concepts. Methods of instruction will include collaborative activities, lecture, and writing activities involving terminology, simplifying expressions, solving equations, and signed number operations. In order to **re-enter** DEV 031, a "C" or higher in DEV 028 is required. The course is not open to students with credit for DEV 031 or higher.
Lecture: 3 hours – Lab: 0 hours
Lab Fee: \$3.00

DEV 029 Math Foundations (A, W, SP, SU) 3 credits
This course is designed for students who need special assistance with basic math to **re-enter** DEV 030–Basic Mathematics. This course includes whole number operations, problem-solving strategies, estimation and number sense, order of operations, math study skills, and fractions operations. DEV 029 is taught through lectures, group activities, tutorial exercises, and small group instruction. In order to **re-enter** DEV 030, a "C" or higher in DEV 029 is required. This course is not open to students with credit for DEV 030 or higher.
Lecture: 3 hours – Lab: 0 hours
Lab Fee: \$3.00

DEV 030 Basic Mathematics (A, W, SP, SU,–DL) 5 credits
Basic Mathematics offers a review of arithmetic concepts including whole numbers, fractions, decimals, percents, proportions, formulas and data interpretation. The course is structured to develop students' critical thinking, problem solving, math and study skills through collaborative activities, writing assignments, real-life applications, and the use of modern technology in the classroom. Traditional, Web-based and hybrid sections are available.
Prerequisite: By placement exam; this mastery learning course is not open to students with credit for DEV 031, MATH 101, 102 or higher.

Lecture: 5 hours – Lab: 0 hours
Lab fee: \$6.00

DEV 031 Pre-Algebra (A, W, SP, SU,–DL) 5 credits
Pre-Algebra is designed for students who have no experience with algebra and for those who need to strengthen their abilities to work with algebraic mathematics. Topics include simplifying algebraic expressions, solving equations, working with exponents, formulas, signed number operations, monomial operations, and application problems. This course will help to develop students' algebra and study skills and help them to perform successfully in MATH 101, MATH 102, and in the workplace. Traditional, Web-based and hybrid sections are available. This course is not open to students with credit for MATH 101, 102 or higher.
Prerequisite: By placement exam or "C" or higher in DEV 030
Lecture: 5 hours – Lab: 0 hours
Lab fee: \$6.00

DEV 040 Reading Improvement (A, W, SP, SU) 5 credits
This course focuses on developing students' basic reading skills. Students will practice strategies for improving reading rate and comprehension. Critical reading skills will be introduced through reading and responding to essays, keeping a journal and vocabulary notebook, and doing workbook activities. In order to re-enter DEV 044, a "C" or higher is required in DEV 040. This course is not open to students with credit for DEV 044.
Lecture: 4 hours – Lab: 2 hours
Lab fee: \$4.00.

DEV 041 Basic Communication Skills (A, W, SP, SU) 5 credits
This course combines elements of the writing process with the basic principles of writing clear, coherent, and well-developed paragraphs. Students will review rules of grammar usage and punctuation. Critical thinking skills will be developed through reading, class discussion, and journal writing.
Prerequisite: By placement exam; not open to students with credit for any of the ENGL 100 series or higher.
Lecture: 4 hours – Lab: 2 hours
Lab fee: \$5.00

DEV 044 Critical Reading and Thinking (A, W, SP, SU) 3 credits
Critical Reading and Thinking is designed to help students develop higher-order reading skills that will help them become more effective and efficient readers. In this course, students will expand basic reading and critical thinking skills. A variety of reading, disciplines will be used for discussion, reading and writing assignments, and for projects that will allow students to critique their self-knowledge and evaluate ideas. The course is open to all Columbus State students.
Lecture: 3 hours – Lab 0 hours
Prerequisite: By placement exam
Lab fee: \$2.00

DEV 050 Career Life Planning (A, W, SP, SU) 3 credits
Career and Life Planning is designed to help students identify and examine their abilities, interests, values, and personalities relative to educational and career choices. Upon completion of this course, a student will be able to develop a plan of action for gaining employment and/or pursuing a field of study that meets his or her personal needs. Traditional and Web-based sections are available.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$11.00.

DEV 090 College Success Skills (A, W, SP, SU) 2 credits
College Success provides students with skills necessary to be successful in their personal, academic, and career-related pursuits. The course focuses on an orientation to the College, study skills, note-taking, test-taking, and time management. This course is required of students who place in two Developmental Education courses.
Lecture: 2 hours – Lab: 0 hours
Lab fee: \$6.00

DEV 098 Special Topics in Developmental Education (On Demand) 1-5 credits
Special topics in developmental reading, writing, mathematics, or related areas. This course is designed to meet special needs.
Lecture: 1-5 hours; Lab: 0 hours
Prerequisites: Will vary
Lab fee: Will vary

DEV 099 Special Topics in Developmental Education (On Demand) 1-5 credits
Special topics in developmental reading, writing, mathematics, or related areas. This course is designed to meet special needs.
Lecture: 1-5 hours; Lab: 0 hours
Prerequisites: Will vary
Lab fee: Will vary

Digital Design and Graphics (GRPH) **Formerly Graphic Communications.** **(For all photography courses, see the Digital Photography Program.)**

GRPH 110 Survey of Media(A, W,-DL) 5 credits
This course provides an overview of the digital design and graphics industry. The student will be introduced to various areas and job opportunities in this field. A basic overview of the printing industry, graphic design, advertising and marketing communications will be discussed. Key terminology and related software used in this business will be reviewed. Laboratory time will be used for understanding basic skills.
Lecture: 5 hours
Prerequisites: None
Lab fee: \$10.00

GRPH 111 Black and White Photography (See Digital Photography FOTO 111) 4 credits

GRPH 112 Introduction to Computer Design (A, W, SP, SU,-DL) 5 credits
This course introduces the student to the four computer software programs most widely used in the graphic communications field. A basic working knowledge of Photoshop, Illustrator, InDesign and QuarkXPress is the primary goal of this course. The student will learn these skills through basic project development.
Lecture: 5 hours
Prerequisites: None
Lab fee: \$29.00

GRPH 113 Fundamentals of Layout & Storyboarding (A, SP) 4 credits
A storyboard is used by graphic artists, Web developers, and audio/video professionals to map out visually a series of actions and events. The storyboard graphically outlines in rough format how the project will appear in the final state. This course will introduce students to the fundamental skills in conceptualizing and developing coherent and compelling storyboards. Significant focus will be placed on learning how to communicate ideas into a logical layout that tells the story.
Lecture: 4 hours
Prerequisites: None
Lab fee: \$20.00

GRPH 114 Digital Photography (See Digital Photography FOTO 114) 4 credits

GRPH 122 Publishing with Quark and InDesign (W, SU,-DL) 5 credits

This course will expand the students knowledge in QuarkXPress and

Adobe InDesign, the most widely used desktop publishing program in the digital design and graphics industry. By working on various projects, students will learn more about the tools and menu options that will help them produce anything from small ads to multipage documents. Type face manipulation, color control and preparing a document for printing are also covered.
Lecture: 5 hours
Prerequisite: GRPH 112
Lab fee: \$36.00

GRPH 131 Advertising Design I (A, W, SP, SU,-DL) 5 credits
This course provides the student with an understanding of how graphic design, advertising and marketing are used together to provide a client with effective visual communications to a specific target market. Elements of design, design philosophy, typography, marketing and color will be discussed in preparation for advertising campaign development.
Lecture: 5 hours
Prerequisites: GRPH 112, GRPH 122
Lab fee: \$25.00

GRPH 150 Package Design I (A, W, SP, SU,-DL) 5 credits
In this course, the student will learn the importance of the package design as an advertising element. Package structure and producing 2-D and 3-D comprehensive package designs will be stressed. An extensive study of required package elements and how to visually present that to the consumer will be discussed. Evaluating the creative process from concept to finished package and how this relates to the consumer is very important to the success of a package.
Lecture: 5 hours
Prerequisites: GRPH 112, GRPH 113, GRPH 122, and GRPH 131
Lab fee: \$25.00

GRPH 242 Media Color Management (A, W, SP, SU,-DL) 5 credits
This course is an introduction to color and how color is perceived and managed across different devices and outputs. Techniques will be used to identify, examine, and measure color to ensure color quality. Students will develop an understanding and application of color theory, color perception, and color management for a color's final destination.
Lecture: 5 hours
Prerequisites: GRPH 110
Lab fee: \$25.00

GRPH 243 Vector Illustration (A, SU,-DL) 5 credits
This course provides the student with a comprehensive knowledge of Illustrator. This software will enable the student to produce complex technical drawings, illustrations and creative typographic applications. Individual projects, team projects and project presentation are used for evaluation.
Lecture: 5 hours
Prerequisite: GRPH 112
Lab fee: \$27.00.

GRPH 251 Photoshop and Design I (A, W, SP,-DL) 5 credits
This course combines the fundamental skills introduced in preliminary courses with the new technologies of desktop scanning and separation. The course incorporates such topics as color separation and photographic manipulation. The software used in this course is Photoshop.
Lecture: 5 hours
Prerequisite: GRPH 112
Lab fee: \$24.00

GRPH 253 Package Prototype (Form Z) (A, SP) 4 credits
In this course the student will learn how to use packaging design projects created in GRPH 150-Packaging Design I to produce prototype packaging using FORM Z software. The student will also learn advanced packaging design techniques, incorporate the packaging design into an advertising campaign, prepare the campaign elements for presentation, and then make

a verbal presentation of the campaign to the class and faculty members.
Lecture: 2 hours – Lab: 4 hours
Prerequisite: GRPH 150
Lab fee: \$28.00

GRPH 258 Photojournalism (SP) 4 credits
(See Digital Photography FOTO 265)

GRPH 260 Digital Design and Graphics Practicum (A, W, SP, SU) 4 credits
Supervised, on-the-job application of knowledge and skills acquired in the classroom.
Lecture: 0 hours – Practicum: 28 clock hours for 4 credits
Prerequisites: Digital Design and Graphics major with GPA of at least 2.5 and completion of 12 hours in technology or permission of instructor
Corequisite: GRPH 261
Lab fee: \$3.00

GRPH 261 Digital Design and Graphics Seminar (A, W, SP, SU) 2 credits
Supervised application of digital design and graphics knowledge to specific area of internship.
Lecture: 2 hours – Lab: 0 hours
Prerequisites: Digital Design and Graphics major with GPA of at least 2.5 and completion of 12 hours in technology or permission of instructor
Corequisite: GRPH 260
Lab fee: \$3.00

GRPH 270 Advanced Black and White Photography (SU) 4 credits
(See Digital Photography FOTO 150)

GRPH 271 Studio Lighting (W) 4 credits
(See Digital Photography FOTO 220)

GRPH 273 Design II (W, DL) 3 credits
This course provides a more extensive and in-depth study of the graphic design process. Using the knowledge students receive in GRPH 131, more complex advertising campaigns and formal presentation options will be emphasized. Individual project presentation and group presentations are a very important part of the business and this class. A class critique will follow each project.
Lecture: 2 hour – Lab: 2 hours
Prerequisites: GRPH112, GRPH 122, GRPH 131
Lab fee: \$25.00

GRPH 278 Photo Lab (A, W, SP, SU) 1 credits
(See Digital Photography FOTO 178)

GRPH 281 Color Photography (A, SP) 4 credits
(See Digital Photography FOTO 160)

GRPH 282 Digital Publishing II (A, SP, DL) 4 credits
This course will provide the student with a more comprehensive study of desktop publishing and how it applies to practical project work. This class will deal with issues that give the student an understanding of the processes involved when producing high-end graphic publications. This course uses QuarkXPress.
Lecture: 2 hours – Lab: 4 hours
Prerequisites: GRPH 112, GRPH 122
Lab fee: \$36.00

GRPH 284 Ad Agency I (AU, SP) 4 credits
The capstone course for the graphic designer, this course provides the student with advanced graphic design techniques and project presentation practices. The student will learn how to produce elements of advertising campaigns in two and three dimensional form. This class will work in a simulated advertising agency environment to develop product advertising from marketing concepts to visual design applications. One formal team

presentation is required for completion of this class.
Lecture: 2 hours – Lab: 4 hours
Prerequisites: GRPH 122, 131 and 251
Lab fee: \$29.00

GRPH 288 Advanced Digital Photography (SP) 4 credits
(See Digital Photography FOTO 214)

GRPH 291 Portfolio Development (W, SU,–DL) 4 credits
In this course, the student will develop a traditional portfolio of his/her graphic design and photography work, as well as create a portfolio on CD. The student will develop an effective visual and informative resume. Learning proper presentation skills when showing the portfolio to prospective employers is a very important part of this class.
Lecture: 4 hours
Prerequisites: GRPH 113, GRPH 273, GRPH 284
Lab fee: \$15.00

GRPH 294 The Business of Photography (–DL) 3 credits
(See Digital Photography FOTO 290)

GRPH 297, 298, 299 Special Topics in Digital Design and Graphics (On Demand) 1-4 credits
Detailed examination of a selected topic in digital design and graphics.
Lecture: 1 to 4 hours – Lab: 1 to 4 hour
Lab fee: \$28.00 each Special Topics Course

Digital Photography (FOTO) (New program effective Autumn 2007)

FOTO 111 Black and White Photography (A, W, SP, SU) 4 Credits
This course introduces students to the basic principles of continuous-tone photography, emphasizing a balance of technical, aesthetic, and business concerns including composition and lighting, as well as manipulative functions, operative settings, exposure, and focus control of cameras and enlargers. Students will also learn to develop film and produce industry acceptable contact sheets and prints. A 35 mm SLR film camera with manual setting capabilities is needed. This course is film-based.
Lecture: 2 hours Lab: 4 hours
Prerequisite: None
Lab fee: \$32.00

FOTO112 Photoshop for Photographers 5 Credits
(A, W, SP, SU,–DL)
This course introduces students to the basic through advanced principles of Photoshop as they relate to digital photography as a business, design, and communication tool. The goal of this industry-based approach is to facilitate the integration of technical ability and visual problem solving skills in order to strengthen visual communication with the medium of digital photography. Students will need access to a version of Photoshop that best suits their needs.
Lecture: 5 hours
Prerequisite: None
Lab fee: \$24.00

FOTO 113 Photoshop for Photographers II 5 Credits
(On Demand,–DL)
This course introduces students to advanced principles of Photoshop as they relate to digital image editing and digital workflow. The goal of this industry-based approach is to continue the integration of technical ability and creative visual problem-solving skills in order to strengthen visual communication and speed up the digital workflow of the medium of digital photography. Students will need access to a version of Photoshop that best suits their needs.

Lecture: 5 hours
Prerequisite: None
Lab fee: \$24.00

FOTO 114 Introduction to Digital Photography (A, W, SP, SU) 4 Credits

This course introduces students to the basic principles and applications of digital photography as a medium, a skill-set, and as an integral part of today's digital literacy needs. Students will capture images using digital cameras while emphasizing the manipulation of camera controls, exposure, lighting, on-and-off camera flash, essential imaging tactics, digital workflow for photography, print, Web and image storage and archival. Students are required to have a digital camera (point and shoot or DSLR).

Lecture: 3 hours Lab: 3 hours
Prerequisite: None
Lab fee: \$15.00

FOTO 115 Digital Photography and Design (A, W, SU) 3 Credits

This course introduces students to the basic to advanced principles of design as they relate to digital photography as a business, design and communication tool. The goal of this industry-based approach is to facilitate the integration of aesthetics and technical ability and visual problem solving skills in order to strengthen visual design and communication with the medium of digital photography. Students are required to have a digital camera (point and shoot or DSLR).

Lecture: 3 hours
Prerequisite: FOTO 114
Lab fee: \$24.00

FOTO 117 Digital Panoramic Photography (TBA) 3 Credits

This course introduces students to the basic and advanced principles of digital panoramic photography. Students will learn the latest technological advances in panoramic digital photography. Students will learn how to control exposure, focus, and white balance when taking 5 to 30 pictures of a single scene (i.e. landscape, building, room interior.) that will be digitally stitched together in a current image-editing software. Focus will be on visual communications of natural and urban landscapes in the context of commercial utilization for marketing or advertising material. Students are required to have a digital camera (point and shoot or DSLR).

Lecture: 3 hours
Prerequisite: FOTO 114
Lab fee: \$24.00

FOTO 118 Real Estate Photography (TBA) 3 Credits

This course introduces students to the basic through advanced principles of digital real estate photography as it is used for promotional flyers, brochures, magazine ads and Web sites. This course will cover all the techniques, skills, equipment and lighting needed to adequately document the interior and exterior of houses with minimal distortion and maximum marketing appeal. Students are required to have a digital camera (point and shoot or DSLR).

Lecture: 3 hours
Prerequisite: FOTO 114
Lab fee: \$24.00

FOTO 119 Digital Infrared Photography (TBA) 3 Credits

This course introduces students to the basic principles of digital infrared photography as it is used for contemporary wedding portraiture and landscapes for client products, magazine ads and Web sites. This course will cover all the techniques, skills and equipment needed to adequately use their existing digital camera to photograph infrared radiation with spectacular, other-worldly results which attain maximum marketing appeal to service-based clients and business clients. Students are required to have a digital camera (point and shoot or DSLR).

Lecture: 3 hours
Prerequisite: None
Lab fee: \$24.00

FOTO 122 Landscape Photography (TBA) 3 Credits

This course is designed to provide students with a firm grounding in the digital photographic techniques and skills to create successful images of landscape photography that could be used as stock photography or marketing and promotional materials for print or Web. Students will learn how to implement specific digital design elements and camera angles that aid in the digital translation of the three-dimensional world to two dimensions for display in print or on the Web. A strong exploration in the technical controls of the camera, from setting the hyper-focal distance to long, tripod based exposures during the daytime, with reference to relevant theories to the work of recent and contemporary landscape photographers. Students are required to have a digital camera (point and shoot or DSLR).

Lecture: 3 hours
Prerequisite: FOTO 114
Lab fee: \$15.00

FOTO 125 Night Photography (TBA) 3 Credits

This course introduces students to the principles of night photography with digital camera equipment and concerns. Students will learn effective motion control techniques, architectural documentation, light painting, and multiple exposure techniques commonly used in today's commercial advertisements and promotional materials. Students will learn how to effectively use the law of reciprocity to create exposures that last up to a half an hour with minimal digital noise. Students will discuss many post-production alternatives to refine the night-time digital capture. Students are required to have a digital camera (point and shoot or DSLR) and a tripod.

Lecture: 3 hours
Prerequisite: None
Lab fee: \$15.00

FOTO 130 Macro and Close-Up Photography (TBA) 3 Credits

This course introduces students to all the concepts, equipment and techniques related to macro and close-up photography as it relates to commercial photography applications such as advertisements and promotions for both print and Web. Students will learn the technical considerations involved in how to use their DSLR to capture the smallest details. Students will implement the core design and exposure theories in digital photography to capture the details of a smaller world. Working with close-up filters, extension tubes and bellows, students will achieve professional macro-photographed subjects. Students are required to have a digital single lens camera (DSLR) and a set of close-up filters (+1, +2, +4) or a macro lens

Lecture: 3 hours
Prerequisite: FOTO 114
Lab fee: \$35.00

FOTO 150 Advanced Black and White Photography (SP) 4 Credits

This course focuses on advanced applied still photography with emphasis on the technical side of exposure, development, advanced darkroom techniques, and advanced use of a 35mm camera. This course places an emphasis on advanced problem solving, pre-visualization and goal-based, visual communication. This course exposes the student to more extensive use of lighting, Zone System of exposure, development comparisons and its effect upon resulting exposure of films and printing papers. It is required that each student have a 35mm SLR camera with variable shutter speed and aperture as well as an incident light meter.

Lecture: 2 hours - Lab: 4 hours
Prerequisite: FOTO 111
Lab fee: \$28.00

FOTO 160 Color Photography (A, SP) 3 Credits

This course is an introduction to color photography with emphasis on color theory, exposure control, scene and shot pre-visualization and composition. Students will examine color theory as it relates to light, the Web and print, with color slide film. This reinforces the concept of pre-visualization, vigilant shot planning and careful exposure consideration which will help the student become a better digital photographer in future classes. Through

reading, practice and class discussion, students will learn elements unique to color photography. Students are required to have a 35 mm SLR camera with manual setting capabilities. This is a slide-film based class.

Lecture: 3 hours

Prerequisite: FOTO 111

Lab fee: \$15.00

FOTO 214 Advanced Digital Photography (A, W, SP, SU) 5 Credits

This course provides an in-depth look at the digital single lens reflex camera (DSLR), advanced digital shooting techniques in different lighting conditions, and digital workflow solutions with image editing software for taking full advantage of the DSLR's full range of capabilities. This course focuses on high resolution JPEG and RAW capture for photo-industry specific venues and outputs. A continuation of aesthetic and technical camera controls will be covered. This course assumes that the student has an understanding of basic digital photography and has access to a DSLR camera.

Lecture: 5 hours

Prerequisite: FOTO 114

Prerequisite: None

Lab fee: \$15.00

FOTO 220 Studio Lighting (AU) 4 Credits

This course has an emphasis on lighting problem solving in relation to indoor studio lighting techniques and equipment for product photography. This course exposes the student to more extensive use of product lighting, lighting techniques and the Zone System of exposure with the use of digital camera systems. This course will introduce the concepts of lighting required for basic commercial product photography with emphasis on lighting products based upon surface qualities and shape. Additional emphasis will be on designing sets and advertising arrangements for print and Web. It is required that each student have a DSLR as well as a hand-held incident light meter (analog or digital).

Lecture: 4 hours

Prerequisite: FOTO 214

Lab fee: \$28.00

FOTO 232 Industrial Photography (TBA) 3 Credits

This course introduces students to the techniques and concerns of industrial photography. The course focuses on the needs of industrial photographers who photograph workers on the job, machinery, industrial layout, prominent places in the industry, etc. These photographs are used in company publications or for ad campaigns. Industrial photography demands knowledge of the industry as well as its equipment. This requires the student have access to a DSLR camera.

Lecture: 3 hours

Prerequisite: FOTO 114

Lab fee: \$18.00

FOTO 250 View Camera Photography (SP) 4 Credits

This is an advanced photography class dealing with large format photography. The student, using college-provided 4x5 equipment, explores the techniques used in large format film exposure, development and printing. The emphasis is upon discovering all of the benefits associated with a view camera in various aspects of the photographic field. Studio work outside of regular class time is required.

Lecture: 2 hours Lab: 4 hours

Prerequisites: FOTO 111, FOTO 150

Lab fee: \$40.00

FOTO 260 Studio and Environmental Portraiture (SP) 4 Credits

The focus in this class will be upon advanced posing, lighting and background creation of the single subject and multiple-subject portraiture. Basic to advanced studio portrait lighting techniques and on-location (indoor and outdoor) portrait lighting techniques will be covered, in addition to on-camera flash fill techniques, and portable strobe use. This course assumes that the student has an understanding of advanced digital photography and has access to a DSLR camera and a hand-held incident

meter (analog or digital).

Lecture: 4 hours

Prerequisites: FOTO 214, FOTO 220

Lab fee: \$40.00

FOTO 265 Photojournalism (SP) 3 Credits

This course is designed to provide an introduction to the principles and theories of photojournalism in the digital era. This course will increase technical understanding of digital photography as a medium enabling the student to document newsworthy events with accuracy. This course provides experience in shooting, digital processing, production-based projects and deadlines, using current digital technology paralleling the photojournalism industry. The latest digital photographic techniques will be employed throughout and the digital work output should be suitable for publication in newspapers, magazines, websites, company publications, brochures, pamphlets, announcements, circulars, folders, handouts, leaflets, throwaways, tracts, and digital slide-show presentations. This course will also cover media ethics, legal issues and the evolving technological impact of photojournalism. This course requires the student have access to a DSLR camera.

Lecture: 3 hours

Prerequisites: FOTO 114 and FOTO 214

Lab fee: \$18.00

FOTO 266 Photojournalism II (TBA) 3 Credits

This course presents advanced principles, concerns and theories of photojournalism in the digital era. This course will increase technical understanding of digital photography as a medium enabling the student to document newsworthy events with accuracy. This course provides continued experience in shooting, digital processing, production-based projects and deadlines, using current digital technology paralleling the photojournalism industry. The latest digital photographic techniques will be employed throughout and the digital work output should be suitable for publication in newspapers, magazines, Web sites, company publications, brochures, pamphlets, announcements, circulars, folders, handouts, leaflets, throwaways, tracts, and digital slide-show presentations. This course will also cover media ethics, legal issues and the evolving technological impact of photojournalism. This course requires the student have access to a DSLR camera.

Lecture: 3 hours

Prerequisites: FOTO 214 and FOTO 265

Lab fee: \$18.00

FOTO 290 Business of Photography (SP,-DL) 4 Credits

This course introduces students to the business and marketing practices common to establish a professional photography business or work as a freelance photographer. Emphasis will be placed on developing professional objectives based upon careful consideration of the financial, legal, organizational, promotional, interpersonal and ethical practices particular to photography. This course is a research and business-planning course. No camera is needed.

Lecture: 4 hours

Prerequisite: None

Lab fee: \$15.00

FOTO 292 Digital Portfolio Development (SP) 3 Credits

This course is designed for digital photography majors to gain knowledge of photography portfolio book design and production as well as Web-hosted portfolio production as it relates to self-promotion for future clients, job placement or pursuit of photo-education at a four year university. Since the course is focused on the printed page and Web-posted portfolio to enhance the multi-medium delivery of any visual information, its potential applications include a full spectrum of possibilities. This course can provide groundwork for continued studies and careers in digital photography and related industries.

Lecture: 3 hours

Prerequisites: FOTO 112 and FOTO 214

Lab fee: \$15.00

FOTO 293 Photo Lab (A, W, SP, SU)**1 credits**

The photo lab provides students currently enrolled in other photography courses the opportunity to enhance their film processing and printing technique skills. This course may be repeated.

Lecture: 0 hours – Lab: 3 hours

Corequisite: FOTO 111 or 150 or 220 or 250

Lab fee: \$28.00

FOTO 297 Field Studies (On Demand)**1 to 5 Credits**

This hands-on course introduces students to a range of natural and man-made subjects that can range from field trips to the local zoo to foreign lands to study the indigenous people of the area, landscapes and architecture. Students learn ways of visualizing and capturing outside subjects at various times of the day or year. Course topics include studying equipment, portable digital storage devices, and other materials necessary to create the best digital photographs in a field environment. Students go on field trips lasting a day or several days depending on the location and topic to be covered. Students are required to have a DSLR and are responsible for the cost of any entrance fees, travel and lodging (if needed) and meal expenses TBA. This course can be repeated.

Lecture: 1 to 5 hours

Prerequisite: FOTO 114

Lab fee: \$15.00

FOTO 299 Special Topics in Digital Photography (On Demand)**1 to 5 Credits**

This course is a detailed examination of a selected topic in Digital Photography. Students are required to have a DSLR and are responsible for the cost of any entrance fees, travel and lodging (if needed) and meal expenses TBA. This course can be repeated.

Lecture: 1 to 5 hours

Prerequisite: FOTO 114

Lab fee: \$15.00

Early Childhood Development (ECD)**ECD 101 Introduction to ECD****1 credit**

This course presents an overview the of early childhood profession including an emphasis on developmentally appropriate practice. Students will be introduced to the historical perspectives, philosophies, theories, trends and issues. Emphasis will be placed on professionalism.

Lecture: 1 hour

Prerequisite: Placement into English 101

Lab fee: \$4.00

ECD 102 Introduction to CDA (W, SU)**1 credit**

This flex-term course focuses on the credentialing process to earn the national Child Development Associate (CDA) credential. Students will study the history of the early childhood profession and discuss the role of professionals in this field. They will complete a written autobiography which is a requirement for the CDA.

Lecture: 1 hour - Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$4.00

ECD 104 CDA Competencies (W, SU)**1 credit**

This flex-term course focuses on the processes to complete requirements to earn the national Child Development Associate (CDA) credential. Students will select a format for presenting their written competencies and required resource file. They will complete written assignments for CDA competency areas and collect samples for their resource file. Procedures for final steps to earn the CDA will be discussed.

Lecture: 1 hour - Lab: 0 hours

Prerequisite: ECD 108

Lab fee: \$4.00

ECD 105 Self-Concept (A, W, SP, SU)**3 credits**

Focuses on the importance of individualizing early childhood practices to meet the needs of children in a manner which develops a positive self-image and individual competence. The course explores impact of teacher's self-image, values and attitudes on preschool classroom and also includes dimensions of self, antecedents of self concept, relationship of feelings to self-concept, and teaching strategies and classroom arrangements to foster self-esteem. Finally, the class examines use of positive communication skills for guidance of young children.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Placement into ENGL101

Lab fee: \$12.00

ECD 106 Observing and Recording (A, W, SP, SU)**1 credit**

This course focuses on appropriate methods of observing young children in group settings. Objective methods for recording children's behavior will be included. Strategies for observing while filling the role of teacher will be addressed. (May be taken concurrently with ECD 105 or 107.)

Lecture: 1 hour – Lab: 0 hours

Prerequisite: ECD 105

Corequisite: ECD 105 or 107

Lab fee: \$4.00

ECD 107 Curriculum Planning (A, W, SP, SU)**3 credits**

This class focuses on strategies to facilitate classroom management and guidance and emphasizes developing goals and objectives as a basis for classroom activities. The course includes preschool curriculum planning and fundamentals of developmentally appropriate practice. Deals with the organization of time and space as it impacts on group child care. This class may be taken concurrently with ECD 105 & 106.

Lecture: 3 hours – Lab: 0 hours

Corequisites: ECD 105 and 106

Lab fee: \$12.00

ECD 105, 106 & 107 may be taken together.

ECD 108 Creative Curriculum (A, W, SP, SU)**3 credits**

This course deals with the principles of creativity and its importance in the life of the young child. Focus is on the sequence of development in child's use of creative materials. Techniques for creative arts and music will be explored, demonstrated and implemented. Students will develop and evaluate materials, objectives and activities in these areas.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 105 and 106

Lab fee: \$12.00

ECD 109 Language Experiences in Early Childhood Programs (A, W, SP, SU)**3 credits**

This course includes theories and sequence of speech/language development, differentiating between normal and atypical language. Focus is on the teacher as facilitator of communication skill development, planning and implementing language arts activities, and selecting and using literature to enhance language development and provide emotional support. Literacy in young children is stimulated through interactive speech, listening, reading and print activities. Guidelines for establishing a literacy area in classrooms and working with parents will also be included.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 105, 106, 107, 108, PSY 261

Lab fee: \$12.00

ECD 110 Infant–Toddler Curriculum (A, W, SP, SU)**3 credits**

This course presents an overview of care giving for infants and toddlers in group settings. Programming for infants and toddlers is emphasized across developmental areas through appropriate routines environment and experiences. The role of staff and parent relationships is explored, Ohio Child Care Licensing Rules are reviewed. This course is offered every quarter, alternating daytime and evening class times.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 105, 106, 107, 108, PSY 261, ECD 162, ECD 172
Corequisite: ECD 163, ECD 173
Lab fee: \$12.00

ECD 112 Physical Development Curriculum (A, SP) 3 credits

This course includes theoretical foundations for the child's physical and motor development. It includes assessing an individual child's motor skills, sequence for the development of motor skills, perceptual-motor development, as well as implementing small and large motor activities in both indoor and outdoor settings. Health, nutrition and safety education activities and discussion of childhood sexuality are part of this course.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 107 and PSY 261

Lab fee: \$12.00

ECD 114 Cognitive Curriculum (W, SP, SU) 3 credits

This course includes the theoretical foundations for the child's cognitive development. Techniques for promoting concept development as well as focus on science and math activities for young children are part of the course. Emphasis is on planning activities which encourage questioning, probing, and problem-solving skills appropriate to individual developmental levels and learning styles. The course also includes studying the effects and use of television, computers and technology in settings for young children.

Lecture: 3 hours - Lab: 0 hours

Prerequisites: ECD 108, PSY 261

Lab fee: \$12.00

ECD 115 School Age Child Care (On Demand) 3 credits

This course will present principles that are important for developing and administering childcare programs for children in Kindergarten through Grade 5. Developmental characteristics of school-aged children will be reviewed and appropriate care, education and guidance practices identified. Information regarding licensing regulations and parent involvement for school-age childcare programs in Ohio will be disseminated.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 105, 106, 107, 108

Lab fee: \$12.00

ECD 120 Interpersonal Communications for Human Services (A, W, SP, SU) 4 credits

This course teaches principles of interpersonal communications for individuals working in Human Services. This course is structured on the premise that the most important resource individuals bring to a helping relationship is their ability to remain self-aware and communicate honestly and directly. Also taught are managing anger, conflict resolution, and assertive behavior. This course is participatory and interactive.

Lecture: 4 hours - Lab: 0 hours

Prerequisites: ENGL 101, ECD 162, ECD 172

Lab fee: \$12.00

ECD 151 ECD Media Resource I (A, W, SP, SU) 1 credit

This course will provide an overview and orientation to resources, equipment and materials available for creating learning activities and materials to be used with and by children. Students will have opportunities to practice safe, economical and appropriate skills in creative ways.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: ECD 105 or permission of ECD coordinator

Lab fee: \$12.00

ECD 152 ECD Media Resources II (A, W, SP, SU) 1 credit

This course will expand students' opportunities to learn, implement, and evaluate appropriate materials and methods for creating learning activities for children. Emphasis will be on extensions of appropriate classroom activities and environments through the use of media materials.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: ECD 105 or permission of ECD coordinator

Lab fee: \$12.00

ECD 161 - 265 ECD Seminars I-V (A, W, SP, SU) 1 credit

Group discussion of experiences related to ECD field experiences and integration of theory and practice. Seminars are taken corequisitely with ECD Field Experience I-V. Seminars focus on observing and recording children's play and interactions, basic principles of guidance, and application of knowledge. Expectations, objectives and requirements build with each successive experience. Successful completion ("C" or better) of each seminar is a prerequisite for the next seminar.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: ECD 105, 106, 107, 108, PSY 261

Corequisite: ECD 171–275

Lab fee: \$4.00 for each course

ECD 171 - 275 ECD Field Experiences I-V (A, W, SP, SU) 1 credit

These courses are an integral part of the ECD program, providing students with the opportunity to apply theory and practice under the guidance of early childhood professionals, who guide and assist in the evaluation of student performance. Students in field experience are observed twice during the quarter by an assigned ECD faculty member. Successful completion with a "C" or better is a prerequisite for the next field experience.

Lecture: 0 hours – Lab: 7 hours

Prerequisite: Formal admission to ECD

Corequisite: ECD 161–265

Lab fee: \$25 for ECD 171; \$20 each for ECD 172–275

ECD 190 Activity Plan Seminar (A, W, SP, SU) 1 credit

This seminar is required for ECD students who have received Prior Learning Assessment credit for Field Experience and Seminars I. The class will focus on preparing written documentation of developmentally appropriate activities for preschool-aged children. Students will learn to write concepts, objectives, and procedures for developmentally appropriate activities, consistent with ECD program outcomes. Students will be observed in their work with children one time as a requirement for completing this class on a pass/fail basis.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: Successful completion with a "C" or better in ECD 105, 106, 107, 108

Lab fee: \$4.00

ECD 200 First Aid (A, W, SP, SU) 1 credit

This course provides the student with training and practice in First Aid for infants and young children. It meets requirements of Ohio Child Day Care Licensing Rules for staff in early childhood settings. Prior Learning Assessment credit may be awarded for a current, valid certificate for First Aid.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: Placement into ENGL 100

Lab fee: \$4.00

ECD 201 Health and Safety (A, W, SP) 3 credits

Course gives training and practice in First Aid, in the recognition and management of communicable diseases, and in child abuse recognition and prevention. This course meets requirements of Ohio Child Day Care Licensing Rules for staff in early childhood settings. Prior Learning Assessment credit may be awarded for current, valid certifications in First Aid, Recognition of Child Abuse and Neglect, and Management of Communicable Diseases.

Lecture: 3 hour – Lab: 0 hours

Prerequisite: Placement into ENGL 100

Lab fee: \$4.00

ECD 202 Management of Communicable Disease (A, W, SP, SU) 1 credit

A course designed to provide students with the knowledge and skills in recognition and management of communicable diseases. This class meets requirements for Ohio Child Day Care Licensing Rules for staff in early childhood settings. Prior Learning Assessment credit may be awarded for

a current, valid certificate in Management of Communicable Diseases.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: Placement into ENGL 100

Lab fee: \$4.00

ECD 204 Recognition of Child Abuse & Neglect (A, W, SP, SU) 1 credit

A course designed to provide students with the knowledge and skills in child abuse recognition and prevention. This class meets requirements for Ohio Child Day Care Licensing Rules for staff in early childhood settings. Prior Learning Assessment credit may be awarded for a current, valid certificate in Recognition of Child Abuse and Neglect.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: Placement into ENGL 100

Lab fee: \$4.00

ECD 205 Parent Involvement–Early Childhood Programs (W, SU) 3 credits

This course will present strategies for working effectively with parents of young children and involving them in child care programs. Emphasis is on how to encourage active participation of parents in early childhood programs, parent conferences and parent education. Family needs, similarities and differences will be discussed as they may affect the teacher’s role in building a partnership with parents.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 206 and ECD 120

Lab fee: \$12.00

ECD 206 Social Development Curriculum (A, SP, SU) 3 credits

This course will include components of social development: recognition of family patterns and traditions, gender identity and sex roles, moral reasoning of young children, play theories and programming for classroom play, multicultural practices and diversity, and social studies for young children. The teacher’s role as facilitator of social development will be defined.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 114, EDC 109

Lab fee: \$12.00

ECD 207 Guidance and Discipline in Early Childhood Programs (W, SP, SU) 3 credits

This course is a study of guidance of young children and social learning theories. Focus is on preventing problem behaviors and teaching desirable behavior through example, communication and setting limits. Issues of child behavior and analyzing discipline problems will be discussed. Focus is on resolving problem situations, changing behavior and development of moral reasoning. Includes helping children cope with stressful situations, and teaches strategies for working with children in special circumstances.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ECD 120

Lab fee: \$12.00

ECD 208 Young Children With Special Needs (A, SP) 3 credits

This course presents the rationale and skills necessary for educating and caring for young children with special needs in programs that are inclusive. It describes strategies for identifying and assessing children with special needs and appropriate adaptive activities and strategies useful in an integrated classroom. Course acknowledges the importance and necessity of collaboration with parents, community professionals and resources.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: ECD 120

Lab fee: \$12.00

ECD 210 Administration and Staff Dynamics 3 credits

This course is an in-depth study of the dynamics of staff interaction in a setting for young children. Focus includes personnel rights and responsibilities, ethical implications of teaching, and team functioning. Problem-solving, professional growth and development, evaluation

processes, and the legal requirements and responsibilities of Ohio Child Day Care Licensing procedures will be explored. Note: Minimum of one year working in a child care setting is necessary.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: ECD 206

Lab fee: \$12.00

ECD 212 Family Ecology (A, SP) 3 credits

Family ecology views the family as an ecosystem and examines its inter-relationships with the environment (biophysical, psychosocial and technological) through processes of perceiving, valuing, spacing, and deciding. Emphasis is placed on family organizations, family members, and their roles.

Prerequisite: ECD 120 and ECD 205

Lecture: 3 hours - Lab: 0 hours

Lab fee \$12.00

ECD 221–230 Contemporary Issues in Early Childhood (SU) 1 to 5 credits

These courses will facilitate offerings of special topics related to ECD, on an annual basis. Topics may include Children’s Literature, Diversity and Young Children, Intergenerational Care, Music & Movement, Fitness for Children, Nutrition, Sign Language, Leadership, Advocacy, etc. These topics may be for new students in ECD or meet requirements for Pre-K Associate Licensed teachers for renewal purposes.

Lecture: 1-5 hours – Lab: 0 hours

Prerequisite: ENGL 100 or permission of ECD Coordinator

Lab fee: \$4.00 - \$12.00

ECD 231 Phonics and the Structure of Language (SU) 5 hours

This course is designed to introduce students to the teaching of phonics and grammar in the context of reading, writing, and spelling. Students will learn basic terminology, will apply this terminology to instruction, and will develop an understanding of, and an appreciation for, the structure and function of language elements. Teacher candidate must achieve a grade of “C” or better.

Prerequisites: ECD 267 and 277

Lab fee: \$ 20.00

ECD 260 ECD Administration Seminar (A, W, SP, SU) 1 credit

This seminar provides opportunities for discussion and activities related to the ECD field experience and for the integration of theory and practice. Focus will be given to the program philosophy, qualifications and roles required to administer programs for young children, and planning to meet the needs of staff, children, families, and the community. Establishing and maintaining sound fiscal practice will be given special emphasis.

Lecture: 1 hour

Corequisite: ECD 270

Prerequisites: ECD 264, 274, 205, 206

Lab Fee: \$4.00

ECD 267 Student Teaching Seminar (A, W, SP, SU) 2 credits

Students will have opportunities to discuss their interactions with young children, staff, and parents in their assigned practicum settings. Students will analyze the components of the learning environment, and their inter-relationships in programs for young children and families. They will plan to integrate theory and practice to facilitate learning and promote quality programming, guidance, health and safety of pre-Kindergarten children.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: ECD 264, 209

Corequisite: ECD 277

Lab fee: \$12.00

ECD 270 Administration Practicum Experience (W, SU) 1 credit

This experience is to be taken corequisitely with ECD 211 Child Care Administration. Students will spend 7 hours a week with an assigned community child care administrator. Objectives related to administration of a child care center, including budgeting, enrolling children, parent

involvement, hiring and monitoring staff, and program development will direct student participation in this practicum experience.

Lecture: 0 – Lab: 0 – Clinical: 7 hours

Prerequisite: ECD 206 or 207

Corequisite: ECD 211

ECD 277 Student Teaching Practicum (A, W, SP, SU) 3 credits

Provide students with opportunities to develop skills in working with young children (individually and in groups), and to integrate theories of child development with teaching practice. Students will work in assigned Pre-Kindergarten classrooms five days a week for a total of 21 hours weekly.

Lecture: 0 hours – Lab: 21 hours

Prerequisites: ECD 274, ECD 209

Corequisite: ECD 267

Lab fee: \$12.00

Economics (ECON)

Students who enroll in economics courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling an economics course.

ECON 100 Introduction to Economics (A, W, SP, SU,–DL) 5 credits

This course is an issues-based introduction to basic economic concepts. Students will relate principles such as scarcity, opportunity cost, and markets to current events, including changes in the minimum wage, environmental controversies, and the actions of the Federal Reserve. A distance-learning version of Introduction to Economics is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: MATH 101, or the equivalent and placement into ENGL 101

Lab fee: \$5.00

ECON 200 Principles of Microeconomics (A, W, SP, SU,–DL)

5 credits

This course introduces students to the economic decision-making of individuals and firms. Topics include scarcity, opportunity cost, supply and demand, consumer choice, elasticity, market structure, profit maximization, resource markets, and international trade. A distance-learning version of Principles of Microeconomics is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: MATH 102 or the equivalent and placement into ENGL 101

Lab fee: \$5.00

ECON 240 Principles of Macroeconomics(A, W, SP, SU,–DL)

5 credits

This course introduces students to economic decision-making at the aggregate level. Topics include national income analysis, the business cycle, inflation, unemployment, fiscal and monetary policies and objectives. A distance-learning version of Principles of Macroeconomics is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in ECON 200 and MATH 102 or the equivalent and placement into ENGL 101

Lab fee: \$5.00

ECON 280 Intermediate Microeconomics (W, SP, SU, –DL) 5 credits

Sophomore level microeconomics course investigating the theory of consumer behavior including indifference curve analysis and the construction demand curves; income and substitution effects; income consumption curves; Engel curves; theory of the firm and derivation of all cost curves in short run and long run; factor price determination; dealing with uncertainty; general equilibrium and Edgeworth Box diagrams; and various pricing systems.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in ECON 200 and MATH 102 or the equivalent and placement into ENGL 101

Lab fee: \$5.00

ECON 290 Capstone Experience in Economics (On Demand)

3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have a special interest in continuing a baccalaureate degree program in economics. The course presents a basic introduction to economic research methodologies that students apply in researching a social science topic of interest. Course requirements include the assembly of a portfolio that covers the student’s academic career at Columbus State Community College, and participation in summative testing of academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: Completion of AA/AS core requirements and at least 75 hours toward the degree and five credit hours in economics

Lab fee: \$5.00

ECON 293 Independent Study in Economics (On Demand) 1 - 5 credits

An individual, student-structured course that examines a selected topic in economics through intensive reading or research. The independent study elective permits a student to pursue his/her interests within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisites: Permission of the instructor and the chairperson and one course in Economics

Lab fee: \$5.00

ECON 299 Special Topics in Economics (On Demand) 1 - 5 credits

A detailed examination of selected topics of interest in economics.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Varies

Lab fee: \$5.00

Education (EDUC)

EDUC 200 Educational Psychology (A,W,SP, SU) 5 credits

This course offers students interested in becoming teachers an opportunity to consider practical, education-related applications of basic introductory psychology concepts. Teaching and learning topics include effective teaching skills; classroom management; the cognitive, social, and emotional development of learners; learner diversity; teacher- and student-centered instructional approaches; assessment of student learning; learning theories; creating optimal learning environments; student motivation; and the technology revolution in education. Methods may include interactive small group work, team presentations, educator communication skill building exercises, and computer lab experiences including beginning training to use educational databases and Microsoft PowerPoint software. A distance-learning version of Educational Psychology is available. Students taking the Web-based version of the course must be familiar with computers, have

an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Prerequisites: Placement into ENGL 101 and PSY 100 with a grade of “C” or better

Lecture: 5 hours

Lab Fee: \$5.00

EDUC 210 Introduction to Education (A, W, SP, SU) 5 credits

This course provides an introduction to the teaching profession with a focus on urban education. Candidates will learn how the historical, philosophical, and sociological foundations of education as well as current cultural, economic and political forces impact urban schools through class discussion, inquiry, and field experiences. Focusing on understanding themselves, understanding their students, and understanding the teaching profession, candidates work in urban community and school settings and critically reflect on their values, experiences, and observations. Specifically, students will gain an educational policy and practice in Columbus Public Schools.

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lecture: 3 hours Lab: 5 hours

Lab Fee: \$ 5.00

EDUC 245 Children with Exceptionalities (A, W, SP, SU) 5 credits

This course is an introductory course that offers teachers, teaching assistants, and students interested in becoming teachers an opportunity to study both the characteristics of children with special needs and the educational practices and programs that work to meet these learners’ needs in inclusive settings. Course topics include causes, prevalence, and assessment of specific exceptionalities; historic and current theories, issues, trends, legal rights, and responsibilities in special education; student placement and service options; teaching strategies, modifications, and accommodations; classroom organization and management; and professional and home-school collaboration for life-long learning.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lecture : 5 hours

Lab Fee : \$ 5.00

Electro-Mechanical Engineering Technology (EMEC)

For other related course descriptions, see Electronic Engineering Technology and Mechanical Engineering Technology.

EMEC 250 Motors and Controls (A, SP) 3 credits

A study in the basic elements of single phase and three phase AC motors and generators, DC motors and generators, transformers, motor controls, and motor protection (fuses and overloads). Students learn how to select, size and wire three phase motors and starters as well as do calculations related to sizing, horsepower, and efficiency.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$15.00

EMEC 251 Electro-Mechanical Controls I (W, SU) 4 credits

This course is a study in the basic interface circuitry used in electro-mechanical controls. Students learn about solenoids, relays, ladder logic, ladder diagrams, and learn how to design and wire controls systems to meet a given set of criteria. Troubleshooting is emphasized at each step.

Lecture: 3 hours – Lab: 3 hours

Prerequisite: EMEC 250

Lab fee: \$15.00

EMEC 260 Electro-Mechanical Controls II (AU, SP) 4 credits

An introduction to Programmable Logic Controllers (PLCs). Students gain knowledge and experience in programming the Allen-Bradley SLC 500 series of PLCs. Students are required to design, wire, and troubleshoot programs to meet a given set of criteria. Both discrete and analog devices are examined.

Lecture: 3 hours – Lab: 3 hours

Prerequisite: EMEC 251

Lab fee: \$20.00

ENGT 100 Introduction to Engineering Technology (AU, SP, SU, W) 3 credits

This course is designed to introduce the beginning student to the Engineering Technology Department at Columbus State. The student will complete exploratory assignments in Mechanical Engineering Technology, Electro-Mechanical Engineering Technology, and Electronic Engineering Technology as well as get a broad overview of the jobs engineering technologists and technicians have and the industries they work in. Students will participate in engineer interviews and plant tours. Additional topics covered included the industrial revolution, manufacturing and electronics in today’s global market, the future of manufacturing and electronics, and Steven Covey’s “Seven Habits of Highly Effective People”.

Lecture: 3 hours – Lab: 2 hours

Electronic Engineering Technology (EET)

EET 103 Investigating Electricity (W, SU) 4 credits

This course introduces the basic concept of electricity, its evolution and inter-relationship with other types of energies. Fundamental principles are explained to prepare students for higher-level courses. The relationship of voltage, current, and power are explored in visually demonstrative lab experiences.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$9.00

EET 110 Electronic Drafting (A, W, SP, SU) 2 credits

An introductory drawing course incorporating the use of instruments, instructions, and practice to produce quality schematics and pictorial diagrams using lettering, electronic, and electrical symbols. The student will be given an introduction to computer-aided drafting (CAD).

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$4.00

EET 111 Electronic Circuits I (A, SP) 4 credits

An introduction to direct current fundamentals, electron physics, current and voltage, work, power, series and parallel resistances, network theorems, electrical measurement devices, circuit analysis. Microcomputers are introduced and used for problem-solving.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: MATH 103 or placement into MATH 111

Corequisites: MATH 111, EET 112

EET 112 Electronic Circuits I Lab (A, SP) 2 credits

This is an introductory course in the use of power supplies and measurement equipment commonly found in laboratories and industrial situations. The student will gain hands-on experience in the use of this equipment. A lab manual is used by the students as an aid to standardization of notation, reference data, and student reporting throughout the course.

Lecture: 0 hours – Lab: 6 hours

Corequisite: EET 111

Lab fee: \$9.00

EET 120 Electronic Circuits II (W, SU) 4 credits

A detailed study of the principles of time varying electrical current and

voltage relationships. The course includes an intensive application of vector analysis as applied to AC circuits, power applications, and the resonance phenomenon. Computer solutions are stressed when appropriate.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: EET 111, EET 112
Corequisites: Math 112, EET 121

EET 121 Electronic Circuits II Lab (W, SU) 2 credits
Laboratory study of signal sources, oscilloscopes, reactance, inductance, AC networks, transformers and filter circuits.
Lecture: 0 hours – Lab: 6 hours
Prerequisites: EET 111, EET 112
Corequisite: EET 120
Lab fee: \$9.00

EET 130 Electronic Devices I (A, SP) 4 credits
An in-depth investigation of the operating characteristics of basic active devices. The course is designed to explain the approximate electrical equivalence and circuit analysis of devices to the basic AC, DC models, with sample applications of the most frequently used circuits.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: EET 120, EET 121, Math 112
Corequisites: EET 131

EET 131 Electronic Devices I Lab (A, SP) 2 credits
The lab exercises in this course closely follow the EET 130 lecture theory for reinforcement through experimentation and theoretical verification of results. All lab exercises use modern devices, planned experiments and industrial standard equipment.
Lecture: 0 hours – Lab: 6 hours
Prerequisites: EET 120, EET 121
Corequisite: EET 130
Lab fee: \$9.00

EET 132 Digital Electronics I (W, SU) 3 credits
An introductory course in digital electronic fundamentals covering number systems, Boolean Algebra, truth tables, Karnaugh maps, basic gates, adders, latches, flip-flops, and counters.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: EET 111, EET 112
Lab fee: \$4.00

EET 144 PC Hardware (A, W, SP, SU) 3 credits
This course provides instruction and hands-on training in computer hardware. Students will gain experience through handling, installing and configuring various components such as motherboards, CPUs, memory, hard disk drives, optical drives and various add-on cards. Students will tear down and reassemble a PC, using established industry standards. This course will aid in acquiring an A+ Certification.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: CIT 101 is recommended
Lab fee: \$12.00

EET 146 Computer Network Communications Systems (A, W, SP, SU) 3 credits
This course is a computer networking course combining networking software and hardware. Topics include networking protocols and network configurations, circuit analysis of high-speed modems, packet-switching techniques, pulse code and pulse-width modulation techniques. Investigation of high-speed modern transmission lines, microwave transmission, and cellular radio are included. The lab emphasizes network component installations and making measurements on bit-error-rates, system noise, and analysis of error detection/correction codes, synchronous and asynchronous protocols.
Lecture: 2 hours – Lab: 3 hours
Prerequisite: EET 144 or CIT 125
Lab fee: \$40.00

EET 154 Electronic Fabrication (W, SU) 2 credits
An introduction to the fabrication of electronic circuits from assembly through testing. Course includes soldering/desoldering techniques, surface mount technology, printed circuit board design, testing techniques, documentation standards and repair/replacement of parts. Credit can be earned by life experience, or proficiency testing. See advisor for details.
Lecture: 1 hour – Lab: 3 hours
Lab fee: \$12.00

EET 203 National Electrical Code (On Demand) 4 credits
This course gives a brief description of each National Electrical Code article and discusses how to reference information in the code. Changes from the previous code and sample calculations are also covered. Not required for students in the Electronic Engineering Technology. Completion of this course does not guarantee eligibility to sit for any licensing examinations and may not meet electrical contractor or Electrical Safety Inspector refresher course requirements. Check with the College or The Ohio Department of Industrial Relations.
Lecture: 3 hours – Lab: 3 hours

EET 241 Electronic Devices II (W, SU) 4 credits
This course covers the concepts of small signal voltage amplification of both low and high frequencies, the concepts of negative and positive feedback, integrated circuit (IC) differential and operational amplifiers, and IC voltage regulation with emphasis on circuit analysis techniques. Computer solution of problems is stressed where practical.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: EET 130, 131
Corequisite: EET 242

EET 242 Electronic Devices II Lab (W, SU) 2 credits
This course is designed to complement EET 241 by providing physical involvement with the various circuits studied therein. The student will construct the circuits presented in lecture, measure their parameters and compare experimental results with those computed from theory.
Lecture: 0 hours – Lab: 6 hours
Prerequisites: EET 130, EET 131
Corequisite: EET 241
Lab fee: \$9.00

EET 243 Digital Electronics II (A, SP) 4 credits
A continuation of the study of digital electronics covering waveforms, the generation of pulses and study of the related circuitry such as multivibrators and one shots. More complex and widely used digital devices such as counters, shift registers, memories, and multiplexers are also presented. The basic units of a computer (bus, ALU) are studied.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: EET 130, EET 131, EET 132
Corequisite: EET 244

EET 244 Digital Electronics II Lab (A, SP) 2 credits
This lab course, corequisite with the lecture course EET 243, gives the student an opportunity to learn and design complex and widely used digital devices. Switching and wave shaping circuits are built using IC chips. Different devices used in building a computer are introduced and employed in experiments.
Lecture: 0 hours – Lab: 6 hours
Prerequisite: EET 130, EET 131, EET 132
Corequisite: EET 243
Lab fee: \$9.00

EET 252 Microprocessors (W, SU) 4 credits
Different building blocks of a microprocessor and their functions are introduced. Methods of data storage and programming of a microprocessor are studied. Use of a microprocessor as a controller and interfacing it to other devices are also studied. A Motorola 68HCII microprocessor is used throughout the course.
Lecture: 4 hours – Lab: 0 hours

Prerequisites: EET 243, EET 244
Corequisites: EET 253

EET 253 Microprocessor Lab (W, SU) 2 credits

This lab course is the practical version of the corequisite lecture course EET 252. Different blocks of a microprocessor studied in lecture are used and experimented on in the lab course. Along with each lab, programming methods for different blocks of the microprocessor are introduced. The practical aspects of using the microprocessor as a controller for other devices are also explored. A 68HCII microprocessor is used.

Lecture: 0 hours – Lab: 6 hours
Prerequisites: EET 243, EET 244
Corequisite: EET 252
Lab fee: \$9.00

EET 255 Instrumentation and Controls (W, SU) 3 credits

This course presents the basic theories and specific methods of measurement of temperatures, pressure, liquid level, and other parameters which may be measured in industrial and scientific applications. The laboratory part of this course enables the student to gain experience with transducers. Major process control schemes as used in industry are covered along with conditions affecting response and stability of control systems

Lecture: 2 hours – Lab: 3 hours
Prerequisites: EET 130, EET 132
Lab fee: \$10.00

EET 260 Capstone Experience in Electronic Engineering Technology (A, SP) 4 credits

A capstone course focusing on electronic systems. Students will master the skills related to the design, development, fabrication, troubleshooting, implementation and documentation of a system or systems relevant to emerging technologies. The course requirements include preparation of system requirements specifications, proposals, prototyping, troubleshooting, testing, and functional demonstration of a core project. The specific student core project will be based on current emerging technology.

Lecture: 3 hours – Lab: 2 hours
Prerequisites: EET 241, EET 242, EET 243, EET 244
Lab fee: \$9.00

Emergency Medical Services (EMS)

EMS 100 First Responder (SP) 4 credits

This course is designed to teach the person (public safety officer or other), who arrives first at the scene of an accident, proper life saving procedures. In terms of emergency victim care, the first responder will provide what is needed until qualified emergency medical technicians arrive.

Lecture: 1 hours – Lab: 3 hours
Lab fee: \$ 35.00

EMS 110 EMT–Basic (A, W, SP, SU) 9.5 credits

This course provides a first phase of training in the career structure of the Emergency Medical Technician (EMT). The course covers all the knowledge and skills required for the state certification examination. Course includes 18 clock hours of clinical experience.

Lecture: 6 hours – Lab: 10 hours
Prerequisites: Placement into ENGL 100 and completed health record required PRIOR TO registration
Lab fee: \$200..00

EMS 111 EMT–Intermediate (A, W, SP, SU) 11 credits

In-depth study of patient assessment, shock physiology, fluid and intravenous therapy is the direction of this course, and covers the knowledge and skills required to take the state certification exam.

Lecture: 7 hours – Lab: 9 hours

Prerequisite: State Certified EMT–Basic and completed health record required PRIOR TO registration
Lab fee: \$230.00

EMS 121 E.M.S. Systems (A) 3 credits

This course deals with the history, development, organization, funding, and control of EMS. It will involve the student in current trends in EMS.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$15.00

EMS 122 Legal Principles for E.M.T. (A) 2 credits

This course encompasses the laws and regulations which govern EMTs and their actions. The course also deals with the rights of the patient and professionalism of the EMT.
Lecture: 2 hours – Lab: 0 hours
Lab Fee: \$12.00

EMS 123 Emergency Psychiatric Intervention (W) 3 credits

This course deals with the EMT’s approach to victims exhibiting abnormal behavior and provides an in-depth look into methods of evaluation and management of people experiencing behavioral crises.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$20.00

EMS 125 Disaster Aid (SP) 3 credits

This course will familiarize the EMT with disaster planning, community needs assessment, organization and control of a community disaster plan, and in developing testing procedures for this plan.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$15.00

EMS 127 Handling Hazardous Materials Situations (SU 1st Term) 2 credits

This course encompasses the safety factors and care the paramedic must consider when dealing with victims exposed to hazardous materials, (i.e., toxic fumes, radioactive materials, electrical, explosive and flammable materials).
Lecture: 2 hours – Lab: 0 hours
Lab fee: \$30.00

EMS 128 Introduction to Rescue for the EMS Provider (SU 2nd Term) 3 credits

This combination classroom and hands-on course provides a basic overview of the rescue process and the tools required for rescue as it relates to the EMS provider. The student will learn to effectively manage the initial stages of a rescue incident without becoming a victim themselves.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$70.00

EMS 130 River Rescue (SU 1st Term) 3 credits

This course deals with rescuing victims from the water. It will include, but not be limited to, self-rescue, rescue from shore, boat-assisted rescues, rescue from boats and rappelling.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: Intermediate swimming ability
Lab fee: \$30.00

EMS 131 Special Topics for Paramedics (AU) 3 credits

In this course, the paramedic will be required to develop and present an in-depth study in an area of individual interest.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Permission of instructor
Lab fee: \$50.00

EMS 132 Emergency Medical Services Dispatcher (SP) 2 credits

The EMS dispatcher course is designed to prepare EMS dispatch personnel to receive requests for emergency medical services and allocate community

resources in response to such request and give pre-arrival instruction.

Lecture: 1 hours – Lab: 2 hours

Lab fee: \$240.00 (includes book and certification fee)

EMS 133 Ice & Cold Water Rescue (W) 2 credits

This course deals with rescuing victims from ice covered and cold water, hypothermia and other related medical concerns.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$40.00

EMS 142 Vertical Rescue (SP) 2 credits

This course is designed to present the fundamentals of rope rescue, using up-to-date equipment and techniques with a major emphasis on safety. Terminology, selection of proper equipment, essential knots, and current standards will be presented, as well as rope rescue systems and litter packaging. Practical application evolutions will include solving rescue problems and evaluating rope rescue systems and/or techniques. Includes rescue of the injured and/or stranded from ledges, cliffs, elevator shafts, etc.

Lecture: 1 hours – Lab: 3 hours

Lab fee: \$40.00

EMS 143 Search and Rescue (A) 2 credits

This course includes the introduction to job responsibilities, philosophy and concepts of effective search and rescue management. It describes preplanning, resources, investigation, interviewing, determining urgency, subject behaviors, search strategy, area probability, base camp set up and management, briefing and debriefing. The course also introduces map and compass reading.

Lecture: 1 hours – Lab: 3 hours

Lab fee: \$40.00

EMS 144 Confined Space Rescue (SP) 2 credits

This course is designed to present the learner with OSHA regulations and requirements. Also confined space entry procedures to safely and properly perform a rescue from tanks, pipelines, manholes, cave-ins, etc. The course will address necessary rescue shoring and tunneling equipment required for a confined space rescue.

Lecture: 1 hours – Lab: 3 hours

Prerequisite: EMS 142

Lab fee: \$15.00

EMS 201 Paramedic Preparation Course 4 credits

This is the course prerequisite for the paramedic certification program. The student will study anatomy, physiology and pathophysiology as they relate to providing paramedic emergency care. The course will cover fluid and electrolyte balance, neuromuscular theory, cardiovascular, respiratory, immune and renal systems, infectious disease, and principles of pharmacology.

Lecture: 4 hours Lab: 0 hours

Prerequisite: EMS 110 or permission of instructor

Lab fee: \$25.00

EMS 211 EMT–Paramedic I (W, SU) 7 credits

This course encompasses the training of the paramedic in the areas of role, triage and assessment of victims, care of the victim in the areas of shock, respiratory system, intravenous therapy and trauma, as well as principles of communications.

Lecture: 5 hours – Lab: 4 hours

Prerequisites: State certified EMT–Basic; EMS 201 OR BIO 101, successful completion of the Health Occupations Basic Entrance Test and the pre-testing process, and completed health record.

Corequisite: EMS 281 and EMS 291

Lab fee: \$165.00

EMS 212 EMT–Paramedic II (A, SP) 7 credits

This course encompasses the training of the paramedic in the areas of

cardiovascular, anaphylaxis, and the endocrine and nervous systems.

Lecture: 5 hours – Lab: 4 hours

Prerequisite: EMS 211, EMS 281, and EMS 291

Corequisite: EMS 282 and EMS 292

Lab fee: \$180.00

EMS 213 EMT–P III (W, SU) 6 credits

This course encompasses the training of the paramedic in the areas of central nervous system, musculoskeletal system, soft tissue injuries, obstetric and gynecologic emergencies, neonatal and pediatric emergencies, and rescue.

Lecture: 4 hours – Lab: 4 hours

Prerequisites: EMS 212, EMS 282, and EMS 292

Corequisites: EMS 283 and 293

Lab fee: \$165.00

EMS 214 EMT–P IV (SP, A) 4 credits

This course encompasses the training of the paramedic in the areas of trauma life support and major incident response, and the continuation of training in ob/gyn/neonatal, behavioral emergencies and rescue.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: EMS 213, EMS 283, EMS 293

Corequisites: EMS 284 and EMS 294

Lab fee: \$180.00

EMS 265 12–Lead EKG Interpretation and Advanced Cardiac Treatment 3 credits

This course will teach students to perform and interpret 12-lead EKGs. Students will also learn to integrate advanced cardiac assessment and 12-lead EKG interpretation into treatment plans for critical patients.

Lecture: 2 hours–Lab: 2 hours

Prerequisite: ACLS certification or equivalent experience

Lab fee: \$75.00

EMS 275 Critical Care Transport 7 credits

This course deals with the special needs of critical patients during transport, including the use of advanced equipment and procedures. The course is designed to prepare paramedics and nurses to function as members of a critical care transport team. (This is the UMBC CCEMT-P course.)

Lecture: 6 hours–Lab: 3 hours

Prerequisites: EMT–P or RN with 2 years experience; CPR, ACLS, Trauma Course, Pediatric Course documentation.

Lab fee: \$310.00 (includes \$200.00 fee required by UMBC for certification)

EMS 281 Hospital Clinical I (W, SU) 2 credits

Hospital clinical observation and supervised experience, encompassing the didactic areas covered in EMS 211.

Lecture: 0 hours – Lab: 5 hours

Corequisites: EMS 211 and 291

Lab fee: \$75.00

EMS 282 Hospital Clinical II (A, SP) 2 credits

Hospital clinical observation and supervised experience, encompassing the didactic areas covered in EMS 211 & EMS 212.

Lecture: 0 hours – Lab: 5 hours

Prerequisite: EMS 281

Corequisites: EMS 212 and 292

Lab fee: \$75.00

EMS 283 Hospital Clinical III (W, SU) 2 credits

Hospital clinical observation and supervised experience, encompassing the didactic areas covered in EMS 211, 212 & EMS 213.

Lecture: 0 hours – Lab: 5 hours

Prerequisite: EMS 282

Corequisites: EMS 213 and 293

Lab fee: \$75.00

EMS 284 Hospital Clinical IV (A, SP) 2 credits
Hospital clinical observation and supervised experience, encompassing the didactic areas covered in EMS 211, 212, 213 and EMS 214.
Lecture: 0 hours – Lab: 5 hours
Prerequisite: EMS 283
Corequisites: EMS 214 and 294
Lab fee: \$75.00

EMS 291 Field Clinical I (W, SU) 1 credit
Field clinical observation and experience.
Lecture: 0 hours – Lab: 5 hours
Corequisites: EMS 211, 281
Lab fee: \$125.00

EMS 292 Field Clinical II (A, SP) 1 credit
Field clinical observation and experience.
Lecture: 0 hours – Lab: 5 hours
Prerequisites: EMS 211, 281 and 291
Corequisites: EMS 212 and 282
Lab fee: \$45.00

EMS 293 Field Clinical III (W, SU) 2 credits
Field clinical observation and experience.
Lecture: 0 hours – Lab: 10 hours
Prerequisite: EMS 292
Corequisites: EMS 213 and 283
Lab fee: \$45.00

EMS 294 Field Clinical IV (A, SP) 2 credits
Field clinical observation and experience.
Lecture: 0 hours – Lab: 10 hours
Prerequisite: EMS 293
Corequisites: EMS 214 and 284
Lab fee: \$65.00

English (ENGL)

(Also see Communication Skills, Theater, and Technical Communication)

Note: Courses taught at a distance (Distance Learning [DL]) may have a higher lab fee than traditionally taught courses.

ENGL 100 Language Development (A, W, SP, SU, -DL) 5 credits
Students develop skills in reading and writing in preparation for ENGL 101 by analyzing the writing of students and professionals and by developing paragraphs and short essays using narration, description, exemplification and/or illustration.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: DEV 041 with a grade of “C” or higher or placement by test. Credit will not count toward graduation in any degree program.
Lab fee: \$3.00

ENGL 101 Beginning Composition (A, W, SP, SU, -DL) 3 credits
Students develop processes for critically reading, writing, and responding to a variety of texts in order to compose clear, concise expository essays. This course or its equivalent is required for all degrees.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 100 with a grade of “C” or higher or placement by test
Lab fee: \$3.00

ENGL 101A MLA/APA Documentation Module (On Demand) 1 credit
Students develop skills in MLA/APA documentation format including quoting, paraphrasing, summarization, works cited, annotated bibliography, and electronic sources. Students will complete several documentation exercises and a final exam testing their knowledge of MLA/APA documentation style.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 101 or transfer credit for ENGL 101 from another school
Lab fee: \$2.00

ENGL 102 Essay and Research (A, W, SP, SU, -DL) 3 credits
A continuation of ENGL 101, this course helps students refine and assess processes for critically reading, writing, and responding to a variety of texts, both traditional and nontraditional. The course includes instruction in research techniques and documentation of sources.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 101 with a grade of “C” or higher
Lab fee: \$3.00

ENGL 111 English Composition (A, W, SP, SU, -DL) 5 credits
An accelerated combination of ENGL 101 and 102, this course helps students develop, refine, and assess processes for critically reading, writing, and responding to a variety of texts, both traditional and nontraditional. The course includes instruction in research techniques and documentation of sources. Lecture: 5 hours – Lab: 0 hours
Prerequisite: Placement test score
Lab fee: \$3.00

ENGL 119 Tutoring for Literacy (A) 3 credits
Tutoring for Literacy is a methods course that instructs students in basic techniques for teaching reading and writing in community agencies that host programs designed to improve literacy in their respective environments. Students in this course participate in two hours of weekly classroom instruction and provide one-to-one tutoring with assigned agencies six hours per week.
Lecture: 2 hours – Lab: 6 hours
Prerequisites: ENGL 101, and either SSCI 101, SSCI 103, PSY 100, or SOC 101

ENGL 190 Freshman Experience in English (See ASC 190)

ENGL 200 Business Communications (A, W, SP, SU, -DL) 3 credits
Emphasis is placed on principles of effective business writing. Students practice writing business letters and memos. A problem-solving or technical report related to the student’s area of concentration is required. Resume preparation and job search techniques are covered.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: ENGL 102 or ENGL 111 with a grade of “C” or higher and at least two quarters or equivalent work experience in a technology
Lab fee: \$7.00

ENGL 202 Writing for Health and Human Services (A, W, SP, SU) 3 credits
Students specializing in human services and health care fields practice the kinds of writing essential to record keeping and research in their professions. Legal and ethical interdisciplinary communication is emphasized. Using practice and real-life cases, students write descriptions, summaries, and evaluations. Job search techniques and letter, memo and report formats are covered. A short research paper using APA documentation is required. This course may substitute for ENGL 200 or ENGL 204 in certain technologies; check with academic advisor.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: ENGL 102 or ENGL 111 with a grade of “C” or higher, enrollment in a technical program, and current clinical /field placement
Lab fee: \$7.00

ENGL 204 Technical Writing (A, W, SP, SU,-DL) 3 credits
Students learn the principles of technical writing and practice those types of writing required of technicians, including letters, memos, and reports as required in a student's technology. A problem-solving report is written. Resume preparation and job search techniques are covered. Oral reports using visual aids are required.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: ENGL 102 or ENGL 111 with a grade of "C" or higher and at least two quarters or equivalent in the student's technology
Lab fee: \$7.00

ENGL 206 Governmental Communications (On Demand) 3 credits
The course emphasizes the principles of effective writing done in government settings. The student learns to write various types of correspondence in a variety of formats in addition to researching and writing a report adhering to specific guidelines. The student will also prepare selected components of a job application package.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or better
Lab fee: \$7.00

ENGL 207 Writing for the Web (A, W, SP, SU,-DL) 3 credits
This course introduces students to the fundamentals of writing on the Web. It examines the stylistic and rhetorical dimensions of creating text for the Web, examines which combination of media should be employed to support text, and considers basic issues of design and usability, including how reading strategies on the WWW differ from reading strategies for paper documents.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111
Lab fee: \$8.00

ENGL 208 Communication for the Mass Media (W, SP) 3 credits
This course prepares students to communicate effectively with the mass media including newspapers, magazines, radio, and television through press conferences, news releases, feature stories, research reports, and statements. Students will prepare and present a portfolio that may include news and feature stories, brochures, flyers, research and other assignments completed for the course.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111
Corequisite: COMM 105 or equivalent is recommended
Lab fee: \$7.00

ENGL 210 Creative Writing (A, W, SP, SU,-DL) 3 credits
Students are introduced to the fundamental techniques of creative writing. Using peer group analysis and workshop techniques, students will develop short pieces in a variety of genres.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 101 or ENGL 111
Lab fee: \$3.00

ENGL 215 Magazine Publication: Literary Criticism, Editing, and Design (W) 3 credits
Through hands-on practice with *Spring Street*, students learn the processes and techniques involved in the production of a literary magazine.
Lecture: 1 hour – Lab: 4 hours
Prerequisites: ENGL 101 or ENGL 111 with a grade of "C" or higher and instructor's permission.
Lab fee: \$3.00

ENGL 220 Literature and Composition (A, W, SP, SU,-DL) 3 credits
An intermediate writing course that focuses on producing expository and critical essays about major literary works and genres. Students are introduced to a variety of works by American and British authors as well as works in translation in the process of analyzing and writing about them. This course, or its equivalent in the ENGL 250–253 series, is required for

all Associate of Arts and Associate of Science degrees, but this course is designed for A.A. and A.S. students transferring to colleges other than Ohio State.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or higher
Lab fee: \$3.00

ENGL 225 Introduction to Fiction (SU,-DL) 5 credits
An intensive study of selected short stories and novels. Through critical reading, discussion, and writing, students will become familiar with important themes and methodologies of fiction. In both short stories and novels, emphasis will be placed upon identifying and analyzing authors' particular uses of the traditional elements of fiction (structure, setting, point of view, etc.) to develop plot and character.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or better
Lab fee: \$1.00

ENGL 230 Introduction to Dramatic Literature (W, SU) 5 credits
Students will study selected masterpieces of western drama and discuss their social, political, and cultural influences. Students will write critical analyses of drama and of plays attended.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or better
Lab fee: \$1.00

ENGL 235 Introduction to Poetry (A, SP,-DL) 5 credits
This course will introduce students to the critical process of reading and responding to poetry from historical, cultural, and gender-based perspectives. Emphasis will be upon traditional and nontraditional forms as well as mainstream and marginalized writers. Students will become familiar with appropriate terminology; however, they will also learn to encounter the poem as a whole piece of written discourse between poet and reader. Students will, therefore, conduct an ongoing oral and written dialogue with the poet (Who is the speaker? Who is the audience? What is the purpose?) and the poem (What is the message?). Students will articulate orally and in writing their own ideas of interpretation based upon a close reading of the text and an informed perspective concerning the historical and cultural circumstances of its origin.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or better
Lab fee: \$1.00

ENGL 240 Introduction to Science Fiction (A,-DL) 3 credits
The historical roots and literary forms of science fiction are introduced. From their readings and viewing of films, students will write critiques, reports, and research papers about science fiction as a literary genre.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or higher
Lab fee: \$3.00

ENGL 245 Introduction to Film (A, W, SP, SU,-DL) 5 credits
This course introduces students to cinema by analyzing the elements of film technique: literature, story, drama, editing, movement, acting, sound, photography, staging, and theory. Film as a cultural product is also discussed. Class activities include critical viewing, discussion, and writing assignments.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 102 or ENGL 111 with a grade of "C" or higher
Lab fee: \$10.00

ENGL 250 Writing About the American Experience (A, W, SP, SU,-DL) 5 credits
An intermediate writing course that extends and refines skills in expository and argumentative writing, critical reading, and critical thinking. Students analyze, discuss and write about major topics pertaining to the theme of the *American Experience*, and the ways in which individual writers have articulated this theme. Assigned reading of United States literature will

address such issues as race, culture, diversity, class gender, and sexual orientation to stimulate writing and facilitate an awareness of the interplay among purpose, audience, content, structure, and style. Students plan draft, and revise essays that represent a sophisticated application of expository skills and critical analysis. This course also refines skills in the areas of researching a topic, documenting sources, working collaboratively, and preparing and giving oral presentations. The course may substitute for ENGL 220 or meet elective requirements in the Associate of Arts or Associate of Science degree programs and transfer requirements in composition or literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 102 or ENGL 111 with a grade of “C” or higher.

Not open to students who have credit for ENGL 251, ENGL 252, or ENGL 253.

Lab fee: \$3.00

ENGL 251 The American Identity (A, W, SP, SU,–DL) 5 credits

An intermediate writing course that extends and refines skills in expository and argumentative writing, critical reading, and critical thinking. Students analyze, discuss and write about major topics pertaining to the theme of identity in the United States, and the ways in which individual writers have articulated this theme. Assigned reading of United States literature will address such issues as race, culture, diversity, class gender, and sexual orientation to stimulate writing and facilitate an awareness of the interplay among purpose, audience, content, structure, and style. Students plan draft, and revise essays that represent a sophisticated application of expository skills and critical analysis. This course also refines skills in the areas of researching a topic, documenting sources, working collaboratively, and preparing and giving oral presentations. The course may substitute for ENGL 220 or meet elective requirements in the Associate of Arts or Associate of Science degree programs and transfer requirements in composition or literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 102 or ENGL 111 with a grade of “C” or higher.

Not open to students who have credit for ENGL 250, ENGL 252, or ENGL 253

Lab fee: \$3.00

ENGL 252 Images of Men and Women (A, W, SP, SU, – DL) 5 credits

An intermediate writing course that extends and refines skills in expository and argumentative writing, critical reading, and critical thinking. Students analyze, discuss and write about major topics pertaining to the theme of gender in the United States, and the ways in which individual writers have articulated this theme. Assigned reading of United States literature will address such issues as race, culture, diversity, class gender, and sexual orientation to stimulate writing and facilitate an awareness of the interplay among purpose, audience, content, structure, and style. Students plan draft, and revise essays that represent a sophisticated application of expository skills and critical analysis. This course also refines skills in the areas of researching a topic, documenting sources, working collaboratively, and preparing and giving oral presentations. The course may substitute for ENGL 220 or meet elective requirements in the Associate of Arts or Associate of Science degree programs and transfer requirements in composition or literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 102 or ENGL 111 with a grade of “C” or higher. Not open to students who have credit for ENGL 250, ENGL 251, or ENGL 253

Lab fee: \$3.00

ENGL 253 Regional American Writing (A, W, SP, SU,–DL) 5 credits

An intermediate writing course that extends and refines skills in expository and argumentative writing, critical reading, and critical thinking. Students analyze, discuss and write about major topics pertaining to the theme of regionalism in the United States, and the ways in which individual writers have articulated this theme. Assigned reading of United States literature will address such issues as race, culture, diversity, class gender, and sexual orientation to stimulate writing and facilitate an awareness of the

interplay among purpose, audience, content, structure, and style. Students plan draft, and revise essays that represent a sophisticated application of expository skills and critical analysis. This course also refines skills in the areas of researching a topic, documenting sources, working collaboratively, and preparing and giving oral presentations. The course may substitute for ENGL 220 or meet elective requirements in the Associate of Arts or Associate of Science degree programs and transfer requirements in composition or literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 102 or ENGL 111 with a grade of “C” or higher. Not open to students who have credit for ENGL 250, 251, or 252

Lab fee: \$3.00

ENGL 259 Survey of United States Literature to 1865 (A, SP)

5 credits

This course examines the works of major writers in U.S. literature from pre-colonial period to 1865. Genres include essays, short fiction, drama, poetry, and the novel. Course activities include reading, class discussion, and writing assignments.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 250 or equivalent

Lab fee: \$3.00

ENGL 260 Survey of Modern U.S. Literature (SU,–DL) 5 credits

This course examines the works of major writers in U.S. literature from 1865 to the present with attention to revision of the canon. Genres include essays, short fiction, drama, poetry, and the novel. Course activities include reading, class discussion, and writing assignments.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 250 or equivalent

Lab fee: \$3.00

ENGL 261 Survey of British Literature I (A, W) 5 credits

A survey of canonical British literary works written before 1789. The course activities will include readings and class discussions.

Prerequisites: ENGL 250 or equivalent

Lecture: 5 hours – Lab: 0 hours

Lab fee: \$3.00

ENGL 262 Survey of British Literature II (SP,–DL) 5 credits

Students will study selected master works of nineteenth and twentieth century British literature. The course activities will include readings, class discussion, and writing assignments.

Prerequisite: ENGL 250 or equivalent.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 250 or equivalent

Lab fee: \$3.00

ENGL 264 Introduction to Shakespeare (W, SU,–DL) 5 credits

This course will examine representative works of Shakespeare concentrating on a critical/analytical approach to both the plays and Elizabethan dramaturgy. Emphasis will be placed upon Renaissance/Elizabethan dramaturgy and conventions, upon language and style, upon the elements of history plays, comedies, romances, and tragedies, and upon analyses of fundamental human experience.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 250 or equivalent

Lab fee: \$3.00

ENGL 265 European Literature in Translation (On Demand)

5 credits

The course will examine the works of representative European writers and cultures to develop an appreciation of the international nature of literary subjects, themes, and movements. Emphasis will be placed upon understanding the historical, philosophical, and social contexts of the various cultures within which European Romanticism, Realism, Naturalism, Existentialism, and modern movements developed.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 250 or equivalent
Lab fee: \$3.00

ENGL 270 African–American Writers (A, W, SP, SU,–DL) 5 credits
This course is a survey of Black American literature from eighteenth-century beginnings to the present; it includes a study of slave narratives, folklore, drama, poetry, and short fiction. Activities include reading and writing assignments, oral presentations, special performances, guest speakers, and field trips.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 250 or equivalent
Lab fee: \$3.00

ENGL 272 Introduction to Folklore (SU) 5 credits
This course looks at 1) oral folklore (e.g., proverbs, riddles, myths, motifs, legends, folktales), 2) customary folklore (e.g., superstitions, folk customs, folk festivals), and 3) material and folk traditions (e.g., folk foods, architecture, costumes). Course activities include field work, reading and writing assignments, and a special project.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 250 or equivalent
Lab fee: \$3.00

ENGL 274 Introduction to Non-Western Literatures (A, SP) 5 credits
This course introduces students to selected classic and modern literature of the non-Western world, including Asia, Africa, the Middle East, and Latin America. Through several literary approaches, students will gain an understanding of the authors, the periods, and the cultures they represent and the various ways they have handled literary themes.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 250 or equivalent
Lab fee: \$3.00

ENGL 276 Women in Literature (SP) 5 credits
This course will explore the history and literature by and about women. The course uses a comparative approach to see how women have treated a variety of themes and how they have worked within the genres of fiction, poetry, and drama. Discussions will consider the literature from the perspectives of gender, history, politics, and culture. Writing assignments will include response journals, documented critical papers, and essay examinations.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 250 or equivalent
Lab fee: \$3.00

ENGL 278 The English Bible as Literature (A, W, SP) 5 credits
This course offers a literary approach to the Bible in English. Students read, in a modern English translation, much of the Old Testament and the New, as well as parts of the Apocrypha. This is not a course in religion. The approach is literary, historical, cultural. The Bible is read as an anthology of writings composed, compiled, translated, and edited over several centuries by many individuals and as a book that has had an enormous effect on our culture, art, and civilization.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 250 or equivalent
Lab fee: \$ 3.00

ENGL 280 Publishing Practicum (SP) 2 credits
Students who have satisfactorily completed ENGL 215 or who have comparable training and experience from another context learn magazine production techniques using *Spring Street* or another college publication as a production laboratory. This practicum may be repeated once and normally taken immediately after completing ENGL 215.

Lecture: 0 hours – Lab: 4 hours
Prerequisite: ENGL 215 or instructor's permission
Lab fee: \$3.00

ENGL 281 Writing Fiction (A, W, SP, SU,–DL) 5 credits
This course introduces students to the art and craft of writing fiction. Emphasis is on the student's own work; however, students will also be required to study the works and writing processes of established writers, male and female, traditional and nontraditional, ancient and modern, and from diverse cultures. Students will keep a writer's journal, respond critically to the works of other students, create and revise a final long work (or combination of shorter works) of at least 4,000 words by the end of the quarter. In addition, students will be required to participate in a public reading of their work at least once during the quarter. Course is repeatable to 10 credits.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 210 with a grade of "B" or better or permission of the instructor
Lab fee: \$5.00

ENGL 282 Writing Poetry (A, W, SP, SU,–DL) 5 credits
This course introduces students to the art and craft of writing poetry. Emphasis is on the students' own work; however, students will also be required to study the works, writing processes, critical commentary on, and oral delivery of established poets, male and female, traditional and nontraditional, ancient and modern, and from diverse cultures. Students will keep a writer's journal, respond critically to the works of other students, create and revise a chapbook of 8-10 finished poems (12-20) pages by the end of the quarter. Students will present selected poems from the chapbook at a public reading. Course is repeatable to 10 credits.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 210 with a grade of "B" or better or permission of the instructor
Lab fee: \$5.00

ENGL 283 Writing Plays (SP) 5 credits
This course introduces students to the art and craft of writing plays. Emphasis is on the student's own work; however, students will also be required to study the works and writing processes of established playwrights, male and female, traditional and nontraditional, ancient and modern, and from diverse cultures. Students will keep a writer's journal, respond critically to the works of other students, create and revise a short play (or an act or acts of a longer work). By the end of the quarter, students will present a public reading or performance of their work. Course is repeatable to 10 credits.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 210 with a grade of "B" or better or permission of instructor
Lab fee: \$5.00

ENGL 284 Writing Creative Nonfiction (A, W, SP, SU,–DL) 5 credits
This course introduces students to the art and craft of writing creative nonfiction (feature writing, travel writing, memoirs, personal profiles, biographies, public relations, etc.). Emphasis is on the student's own work; however, students will also be required to study the works, writing processes, critical commentary on, and oral delivery of established nonfiction writers, male and female, traditional and nontraditional, ancient and modern, and from diverse cultures. Students will keep a writer's journal, respond critically to the works of other students, create and revise a complete longer work (or a combination of shorter pieces) of at least 3,000-4,000 words by the end of the quarter. Students will present a public reading of their work during the quarter. Course is repeatable to 10 credits.

Lecture: 5 hours – Lab: 5 hours
Prerequisite: ENGL 210 with a grade of "B" or better or permission of instructor
Lab fee: \$5.00

ENGL 285 Writing to Publish (W, S,–DL) 5 credits
This course introduces students to procedures for preparing a manuscript for marketing and publication. Students select a work or works for publication from a genre (fiction, poetry, drama, literary nonfiction), submit

manuscripts for peer review at least three times during the quarter, and revise and edit their work throughout the quarter. Students research a market for their work, write the appropriate query or cover letter, and prepare the manuscript for submission. Since length requirements for manuscripts vary according to genre and target market, the instructor will determine the length requirement for successful completion of the course. The final exam for the course is a completed and corrected manuscript package ready for mailing. Students will also have the opportunity to give a public performance of their work. Course is repeatable to 15 credits.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ENGL 281, ENGL 282, ENGL 283, or ENGL 284 with a “B” or better or permission of the instructor

Lab fee: \$5.00

ENGL 290 Capstone Experience in English (On Demand) 3 credits

A capstone course focusing on English. Paradigms and their underlying assumptions will be explored. Students will work on developing research techniques and methodologies. Students will apply these techniques to a project of their own design, complete a personal portfolio covering their studies at Columbus State, and participate in a summative testing of their academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: 75 hours completed toward the degree including 10 credits in ENGL courses beyond ENGL 220 or equivalent

Lab fee: \$10.00

ENGL 297 - 298 - 299 Special Topics in English (On Demand)

1-5 credits

Special topics in English language or literature designed to meet specific needs.

Lecture: Hours vary– Lab: Hours vary

Prerequisite: Varies

English as a Second Language (ESL)

ESL 044 Fiction for Non-Native Readers (A, W, SP) 4 credits

This course gives ESL students an opportunity to read various authentic (unedited) literary works in English including short stories, plays and short novels. The students will explore the settings, structures, plot and character development. Students will build vocabulary as well as analyze cultural settings. Analysis will come through journals, presentations, group discussions and class discussions. Credit will not count toward graduation in any degree program.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: ESL 099 or placement into ESL 100

Lab fee: \$4.00

ESL 090 Critical Skills for College Success (On Demand) 3 credits

This course prepares non-native students to achieve their academic goals at a U.S. college or university. They will examine U.S. classroom procedures, professor-student interaction, thinking styles and learning styles. They will also be trained in techniques for effective reading, writing and critical thinking in a variety of academic fields. Students will demonstrate these techniques through the completion of mini-projects derived from a variety of courses currently offered at CSCC. Students’ final project will be derived from an entry-level course in their chosen field of study. Credit will not count toward graduation in any degree program.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ESL 099 or placement into ESL 100

Lab fee: \$3.00

ESL 092 Basic Oral Communication (A, W, SP, SU) 3 credits

This course will introduce students to the American sound system and quickly expand their working oral vocabulary. It will also equip students

to perform vital language-based functions on campus and in the community. The course will be based upon daily classroom participation and the satisfactory completion of each language function. Credit will not count toward graduation in any degree program.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Placement into ESL 097

Lab fee: \$3.00

ESL 093 Intermediate Oral Communication (A, W, SP, SU)

3 credits

This course will help students to increase their effectiveness in social, academic and professional interactions in a U.S. setting. Students will expand their working oral vocabulary, master useful American idioms and improve their pronunciation. Students will examine and practice the conventions of contemporary American communication, both verbal and nonverbal. The course will be based upon daily class participation, oral presentations and evidence of improvement found through a contrast of audio-taped readings. Credit will not count toward graduation in any degree program.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ESL 098 (may be taken as a corequisite) or placement into ESL 098

Lab fee: \$3.00

ESL 094 Advanced Oral Communication (A, W, SP, SU) 3 credits

Students will increase their awareness of the values and beliefs that underlie cultural norms in the U.S. Readings on various aspects of contemporary American culture will provide the springboards to information gathering outside of class (through additional reading and interviews with native speakers), in-class discussions, and four required oral presentations. Students will practice standard American pronunciation and intonation and will master useful vocabulary and idiomatic expressions. Credit will not count toward graduation in any degree program.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ESL 099 (may be taken as a corequisite) or placement into ESL 099

Lab fee: \$3.00

ESL 095 Public Speaking for Non-Natives (A, W, SP, SU) 3 credits

This course will prepare students whose first language is not English to participate effectively in COMM 105–Speech. Students will study and practice public speaking techniques, with particular emphasis on native pronunciation, intonation and delivery. Students will be required to conduct interviews and research in preparation for demonstration and persuasive speeches, presented individually and in groups. Students will receive feedback on their oral production from their instructor and their classmates regularly and will be audio/video taped on occasion. Credit will not count toward graduation in any degree program.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ESL 100 (may be taken as a corequisite) or placement into ESL 100

Lab fee: \$5.00

ESL 097 Basic English as a Second Language (A, W, SP, SU)

10 credits

Students who already have limited command of the English language build upon their vocabulary and begin to eliminate errors through the study of basic grammar, readings, guided discussions, and written and oral exercises. Credit will not count toward graduation in any degree program.

Lecture: 10 hours – Lab: 0 hours

Prerequisite: Placement test

Lab fee: \$5.00

ESL 098 Developmental English as a Second Language

(A, W, SP, SU)

10 credits

Students will continue to develop reading, writing, listening and speaking skills through the study of intermediate grammar, readings, guided discussions, and written and oral exercises. Credit will not count toward

graduation in any degree program.

Lecture: 10 hours – Lab: 0 hours

Prerequisite: “C” in ESL 097 or placement test

Lab fee: \$5.00

ESL 099 ESL: Reading, Grammar, and Composition (A, W, SP, SU) 10 credits

Students will prepare for academic course work through the study of advanced grammar, sentence structure, paragraph organization and pre-writing techniques and will respond to college level readings in guided discussions, oral presentations and paragraph-length essays. Credit will not count toward graduation in any degree program.

Lecture: 10 hours – Lab: 0 hours

Prerequisite: “C” in ESL 098 or placement test

Lab fee: \$5.00

ESL 100 English as a Second Language: Composition (A, W, SP, SU) 5 credits

Students will polish their writing skill through grammar reviews, written exercises, and the study of sentence structure, rhetoric, and essay organization. Students will respond to both the content and technique of college level readings. Students will write essays using description, narration, cause and effect and comparison/contrast. Credit will not count toward graduation in any degree program.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: “C” in ESL 099 or placement

Lab fee: \$5.00

SL 299 Special Topics in English as a Second Language (On Demand) 1-5 credits

A detailed examination of selected topics of interest in English as a Second Language. Special topics courses are offered to meet the special needs or interests of a group of students and pilot new courses.

Lecture: Varies

Prerequisite: Varies

Lab fee: \$1.00 to \$5.00

Environmental Science, Safety and Health (ENVR)

ENVR 101 Introduction to Environmental Science, Safety and Health (A, SP) 3 credits

An introduction to the environmental technology field. This course provides an overview of environmental laws and regulations, toxicology, ecology, air pollution, water pollution, water treatment, hazardous materials, solid and hazardous waste, waste site investigation and remediation, and occupational safety and health.

Lecture: 3 hours – Lab: 0 hours

ENVR 110 Industrial/Municipal Pollution Control (W) 3 credits

An overview of the management, treatment and disposal practices utilized for pollution control. This course covers the nature of pollution and provides an introduction to air pollution control devices, wastewater treatment techniques, solid and hazardous waste management, treatment and disposal, recycling and pollution prevention.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$18.00

ENVR 111 Hazardous Materials Management (A, SP) 3 credits

An overview of the management practices for hazardous materials and hazardous waste. This includes principles of science and technology, occupational health and safety concerns and regulatory compliance. An emphasis will be placed on DOT, OSHA and RCRA requirements.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$20.00

ENVR 120 Environmental Aspects of Soils (A, SP, SU) 5 credits

A multi disciplinary overview of soil science. Topics include soil formation and development, classification systems, soil mechanics, soil chemistry and contamination, soil hydrology, agricultural aspects of soil, soil erosion, soil microbiology and soil sampling techniques. Soil characteristics will be explored by means of laboratory examination and elementary testing techniques.

Lecture: 4 hours – Lab: 2 hours

Lab fee: \$15.00

ENVR 130 Environmental Laws and Regulations (W) 5 credits

A study of American political institutions and a brief history of the American environmental movements and the resulting environmental regulations. A study of local, state, and federal codes and regulations as they apply to the handling, treatment, storage, and disposal of hazardous materials and wastes. Emphasis on NEPA, The Clean Water and Air Acts, the Resource Conservation and Recovery Act (RCRA), and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund).

Lecture: 4 hours – Lab: 2 hours

Lab fee: \$15.00

ENVR 158 Environmental Site Assessment (A, SP–DL) 3 credits

A study of environmental site assessments, including Phase I ESAs for real estate transactions. Environmental regulations and standard practices will be applied in the analysis of a site-specific project. Additional property assessment issues addressed in this class include Environmental Impact Statements, wetlands, asbestos, lead, mold and radon. Students enrolled in the distance version of this course will be required to come to campus for an orientation meeting, completion of hands-on laboratory exercises and for the exams.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$12.00

ENVR 160 OSHA 10-Hr. Construction Safety and Health (W, SP) 1 credits

This course covers the approved Occupational Safety and Health Administration (OSHA) curriculum for the 10-hour Outreach Training Program for Construction Industry Safety and Health. Topics include introduction to OSHA, electrical safety, fall protection, personal protective and lifesaving equipment, materials handling, storage, use and disposal, equipment safety, excavation, stairways and ladder safety and other applicable OSHA standards. Course completion cards will be issued to individuals successfully completing the class.

Lecture: 1 hour

Lab fee: \$10.00

ENVR 170 General Industry Safety and Health (A) 4 credits

This course covers the approved Occupational Safety and Health Administration (OSHA) curriculum for the 30-hour Outreach Training Program. Topics include an introduction to OSHA, hazardous materials, walking and working surfaces, fire protection, personal protective equipment, confined space, lockout/tagout, machine guarding, welding and brazing safety, electrical safety, industrial hygiene and other applicable OSHA standards. Course completion cards will be issued to individuals successfully completing the class.

Lecture: 4 hours

Lab fee: \$10.00

ENVR 220 Environmental Chemistry (On Demand) 5 credits

Effective solutions to environmental problems require an understanding of the chemical processes that occur in the environment. This course provides a basic knowledge of environmental chemistry including water, soil and atmospheric chemistry. The chemistry of the transport and fate of pollutants in the environment, hazardous material chemistry and toxicology are covered. Related laboratory exercises will be performed including utilizing analytical techniques, instrumentation and quality assurance.

Lecture: 4 hours – Lab: 3 hours
Prerequisite: CHEM 111
Lab fee: \$18.00

ENVR 222 Water Treatment Techniques (SU On Demand) 3 credits

This course is designed to permit the student to attempt the State of Ohio Class One Water Operator's exam. The course will emphasize water quality methods of water treatment and laboratory processes. Practical experience will be emphasized.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: High school chemistry or CHEM 100, MATH 104 or equivalent, or permission of instructor

Lab fee: \$20.00

ENVR 223 Wastewater Treatment Techniques (W) 3 credits

This course is designed to provide the training to permit the student to attempt the State of Ohio Class One Wastewater Operator exam. The course will emphasize types of treatment, equipment, hygiene and public health aspects, sewer systems, and laboratory processes. Practical experiences will be emphasized.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: High school chemistry or CHEM 100, MATH 102 or by permission of instructor

Lab fee: \$20.00

ENVR 224 Environmental Hydrology (SP) 3 credits

Study of the occurrence, movement, and behavior of water in the hydrologic cycle. Introduction to the concepts of controlling the movement of surface water and ground water, and the ways in which these resources can be exploited and/or contaminated.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: MATH 102

Lab fee: \$15.00

ENVR 250 Environmental Sampling (A) 5 credits

A course covering the techniques and methods used in sampling of environmental media, especially for field investigations. Emphasized is the sampling of air, surface water, ground water, soil and hazardous materials. Topics include the regulatory framework, project coordination, drilling techniques, monitoring well installation, field instrument calibration, decontamination, and supplemental investigative techniques.

Lecture: 4 hours – Lab: 3 hours

Lab fee: \$20.00

ENVR 252 Health and Safety Training for Hazardous Waste Operations (W, SU,–DL) (40-Hour OSHA Training) 3 credits

Satisfies 29 CFR Part 1910.120(e) under OSHA. A health and safety training course for individuals who may be involved in the investigation, remediation and operation of hazardous waste sites. Topics include hazardous materials chemistry, toxicology, air monitoring instrumentation, air purifying respirators, self-contained breathing apparatus, supplied air respirator systems, protective clothing, decontamination, simulated hazardous materials response incidents, and appropriate problem sets. Students enrolled in the distance version of this course will be required to come to campus for an orientation meeting, completion of hands-on laboratory exercises and for the final exam.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$100.00

ENVR 253 Environmental Systems Analysis (W) 3 credits

This course introduces engineered environmental systems and practical applications of their operation and maintenance. Topics include flow diagrams, schematics, plumbing and piping, pumps, blowers, electrical systems, instrumentation, flow measurements, process control, troubleshooting and safety for engineered systems.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: ENVR 110

Lab fee: \$18.00

ENVR 254 Subsurface Restoration Techniques (SP) 5 credits

This course will address subsurface remediation techniques and treatment technologies used at hazardous waste sites. Course topics include the regulatory framework for subsurface restoration, clean-up goals, basic contaminant chemistry and transport, supplemental subsurface investigative techniques, soil and groundwater remediation techniques and water and air treatment technologies.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: ENVR 250

Lab fee: \$20.00

ENVR 255 Air Pollution and Monitoring (W) 3 credits

This course covers the fundamentals of air pollution, such as sources, important atmospheric aspects and the effects of air pollutants. It also focuses on EPA methods for stack and ambient sampling of various air contaminants. Other topics include continuous emission monitoring, air pollution control options, and applicable permitting and reporting requirements.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: CHEM 111

Lab fee: \$23.00

ENVR 256 Hazardous Materials Refresher Training (SU,–DL) (On Demand) 1 credit

This course provides refresher training for site workers and emergency operators who have completed the 24 or 40-hour courses and complies with the 29 CFR 1910.120 refresher training requirements. Emphasis is placed on practical exercises and review of relevant changes in OSHA requirements. Successful completion of the course is based on classroom participation and completion of a written assignment. Students enrolled in the distance version of this course will be required to come to campus to complete the final quiz. This is a repeatable course.

Lecture: 1 hours – Lab: 0 hours

Lab fee: \$50.00

ENVR 265 OSHA 30 Hr. Construction Safety and Health (On Demand) 4 credits

This course covers the approved Occupational Safety and Health Administration (OSHA) curriculum for the 30-hour Outreach Training Program for the Construction Industry Safety and Health. Topics include an introduction to OSHA, safety and fall protection, health hazards, material handling, equipment safety, concrete and masonry construction, welding and cutting, excavation, stairways and ladder safety and other applicable OSHA standards. Course completion cards will be issued to individuals successfully completing the class.

Lecture: 4 hours

Lab fee: \$10.00

ENVR 275 Industrial Hygiene (SP) 4 credits

This course is an overview of the science of industrial hygiene. This course describes the process of investigating and examining workplace hazards and how those hazards are abated. The laboratory will emphasize the use of instrumentation and important calculations. Topics include introduction to industrial hygiene, principles of toxicology, occupational safety and health standards, occupational skin and noise disorders, indoor air quality, ergonomics, engineering and administrative controls and personal protective equipment.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$10.00

ENVR 282 Sustainable Building Strategies (SP) 3 credits

This course is an introduction to the field of environmentally-friendly construction. Sustainable architecture and building site principles will be presented, including strategies for energy-efficient heating and cooling, "green" building materials and methods, alternative energy sources, water efficiency and waste management. Topics include the need for sustainability, energy efficient design, construction and controls, site selection, passive solar heating and cooling, "green" building materials and methods,

alternative energy sources and water efficiency and waste management.
Lecture: 3 hours
Lab fee: \$10.00

ENVR 283 Ecological Residential Construction (On Demand)

3 credits

This course addresses the important aspects of building green homes. The topics include environmentally friendly design, the use of alternative materials, and the utilization of sustainable systems.

Lecture: 2 hours – Lab: 2 hours
Lab fee: \$10.00

ENVR 291 Field Experience (SU)

3 credits

Off-campus work experience in environmental services industry that augments formal education received in the technology with actual work conditions and job experience. “N” credit will not be allowed for this course.

Lecture: 0 hours – Lab: 36 hours
Lab fee: \$15.00

ENVR 299 Special Topics on Environmental Science, Safety and Health (On Demand)

1-5 credits

Special topics from the environmental industry designed to meet specific needs.

Lecture and/or Lab Hours: Vary

Facility Management (See Architecture)

Finance (FMGT)

FMGT 101 Personal Finance (A, W, SP, SU,–DL)

4 credits

This course presents a lifetime program of money management for the individual. Topics such as budgets, savings, job search, buying a house, insurance, mutual funds, stock market, real estate investments, taxes, and estate planning are covered. Students will be able to write a basic personal financial plan.

Lecture: 4 hours
Lab fee: \$3.00

FMGT 201 Corporate Finance (A, W, SP, SU,–DL)

5 credits

An introduction to the principles of financial management of private business firms. Topics covered include financial analysis, financial planning, working capital management, financial leverage, sources of financing, capital budgeting and capital markets.

Lecture: 5 hours
Prerequisite: ACCT 106 (Course can be substituted for ACCT 221)
Lab fee: \$3.00

FMGT 202 Money and Banking (A, W)

5 credits

A study of the operation, organization, and economics of U.S. monetary and banking systems. Current trends, the monetary policy process, and the regulation of financial markets is also covered.

Lecture: 5 hours
Prerequisite: ECON 200
Lab fee: \$3.00

FMGT 211 Investments (W, SP)

4 credits

This course examines the investments for the individual with emphasis on

the securities markets. Topics presented include risk and return trade-offs, sources of investment information, stocks, bonds, mutual funds, options, and tax considerations.

Lecture: 4 hours
Lab fee: \$3.00

FMGT 221 Financial Institutions and Market (W)

4 credits

This course examines the operation, organization, and structure of the U.S. financial system. Financial markets will be examined along with financial institutions with an emphasis on commercial banking. An analysis of commercial credit will be covered which will include the study of credit control and the management of collections.

Lecture: 4 hours
Lab fee: \$3.00

FMGT 251 Finance Research (A)

2 credits

The student receives exposure to current developments in finance and economics through projects and research papers. Designed to serve as a capstone course for graduating students. Students can substitute BMGT 272–Case Studies in Business Seminar for this course.

Lecture: 2 hours
Lab fee: \$3.00

Fire Science (FIRE)

FIRE 100 Introduction to Firefighting (A, W)

3 credits

A broad overview of a career in the fire service, including the basics of firefighter safety, fire behavior, etc. Not available to students with Fire 117 or equivalent Firefighter I & II certification.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: ENGL 100
Lab Fee: \$20.00

FIRE 102 Prevention Practices (On Demand)

3 credits

An overview of inspection programs, with emphasis on fire protection procedures and practices. Relationships of prevention programs with government, private sector, codes and arson is discussed.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: FIRE 117

FIRE 104 Fire Investigation Methods (SU, A)

4 credits

A study of the principles of fire investigations including recognition, preservation, collection, and presentation of arson evidence. Arson laws, interrogation of witnesses, application of photography, preparation of reports and adjustment of insured losses. Estimation of loss due to fire, smoke and water.

Lecture: 3 hours – Lab: 2 hours
Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification.
Lab fee: \$25.00

FIRE 106 Protection Systems (SU)

3 credits

The design and operation of fire protection systems, including water distribution, direction, alarm and watchman services and protection systems for special hazards. Carbon dioxide, dry chemical, foam and water spray systems studied in detail. Also covered are standpipes and sprinkler systems and methods of reestablishment after use.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification.
Lab fee: \$5.00

FIRE 108 Fire Fighting Command I (W)

4 credits

Group operations and command strategy for fireground operations. The

training of companies and officers to operate as a team. Methods of implementing plans and strategy into tactical operations.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification.

Lab fee: \$5.00

FIRE 109 Fire Fighting Command II (SP) 3 credits

Group operations and command strategy at the chief officer level, preplanning of fire fighting operations, deployment of personnel and equipment. Specific tactical problems analyzed. Operations and tactics including mutual and outside aid in fire fighting are presented.

Lecture: 0 hours – Lab: 6 hours

Prerequisites: FIRE 108, FIRE 117 or documented Firefighter I & II certification.

Lab fee: \$25.00

FIRE 116 Personnel Training Methods (On Demand) 3 credits

Methods of instruction, application of audio visual equipment, testing and evaluation, and preparation of materials are introduced. Special emphasis is placed upon planning an organizational training program.

Lecture: 1 hours – Lab: 4 hours

Lab fee: \$3.00

FIRE 117 Firefighter I & II (A, SP, SU) 12 credits

The course consists of all the performance and knowledge objectives in the current NFPA Standard 1001 for Firefighter I and II including but not limited to: fire department organization, safety, fire alarm, fire behavior, extinguishers, rope, ladders, hose streams, fire control, salvage and rescue. This course is required for employment as a professional firefighter. Successful completion of this course will enable students to take the State of Ohio certification exam for Firefighter I & II levels (240 hour firefighter course).

Lecture: 8 hours – Lab: 14 hours

Lab Fee: \$250.00

FIRE 151 Fire Prevention Codes (On Demand) 4 credits

A study of important building construction and fire safety codes with emphasis on fire prevention and enforcement.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: FIRE 102 and 117

FIRE 153 Fire Hydraulics (SP) 4 credits

An introduction to hydraulic theory. Drafting of water, velocity and discharge, friction loss, engine and nozzle pressure, fire streams, and pressure losses in flowing hydrants. Practice in application of hydraulic principles. Flow and pump testing, as well as study of water distribution, are included.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification.

Lab fee: \$8.00

FIRE 202 Hazardous Materials II (On Demand) 4 credits

A study of the properties and behavior of various hazardous chemicals in our environment. An overview of the physical and chemical characteristics of toxic, flammable, and reactive substances in the forms of solids, liquids, and gases combined with practical application of methods for responding to emergencies involving such materials. Emphasis will be placed on safe approach to incident scenes, positive identification of materials, and accurate analysis of the hazards presented by hazardous materials. Simulation and tabletop emergency exercises will be utilized throughout the course.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: LAWE 268

Lab fee: \$6.00

FIRE 203 Legal Aspects of Fire Protection (W) 3 credits

Introduction to laws, civil and criminal actions, and the judicial system. Municipal liability for acts of the fire department and its members. Pensions, salary and compensation and termination. Duty owed by the public to members of the fire department. Also covered are the initiation, operation, and liability and legal aspects of mutual aid, primary response contracts, and private contracts.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$5.00

FIRE 204 Fire Service Rating System (Fire Insurance) (A) 2 credits

Covers the history of fire insurance and the principles and practices of inspections by the insurance services office. Details the rating system as used by I.S.O. to determine premium rates. Extensive study of methods used by I.S.O. to classify public protection and individual property fire suppression.

Lecture: 1 hours – Lab: 2 hours

Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification

Lab fee: \$5.00

FIRE 205 Fire Service Company Officer (Supervisory Methods) (A) 3 credits

Supervision techniques applied to public service personnel. The study of the need for job descriptions and job procedures, reports, oral and written directions, work evaluation, meetings, discipline and conference leaders. Methods of instruction effective in teaching and motivating personnel.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification

Lab fee: \$5.00

FIRE 206 Administration of a Fire Department (SP) 3 credits

The contemporary fire protection agency, its functions, structure, and operational techniques. Principles of organization, staffing, budgeting, controlling, coordinating, planning, research in fire protection. The development and maintenance of liaison and cooperation between fire and police departments.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: FIRE 205, FIRE 100 or FIRE 117 or documented Firefighter I & II certification

Lab fee: \$5.00

FIRE 207 Customer Services for the Fire Services (Public Relations) (A) 3 credits

The psychology of relations between public service employees and the general population. Policies and practices of community relations as they apply to public service agencies. Current national and local community problems.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$5.00

FIRE 209 Fire Fighting Problems (On Demand) 3 credits

Procedures of fighting aircraft fires. Procedures of fighting fires involving hydrocarbons, and LP gas. Hazards of electrical emergencies and proper procedures of handling them. Examples of disaster and stress involving emergency personnel.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: FIRE 117

Lab fee: \$3.00

FIRE 210 Construction/Collapse for Fire/Rescue (A) 4 credits

An introduction to present and past practices of building construction. Deals with important standard elements of buildings, the hidden dangers of old and new buildings, what influences structural stability of walls in fires, and how to look for and judge hundreds of structural dangers. Relationships between construction materials and fire damage of a building

are presented.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: FIRE 100 or FIRE 117 or documented Firefighter I & II certification

Lab fee: \$20.00

French (FREN)

FREN 101 Elementary French I (A, W, SP, SU) 5 credits

Introduction to the fundamentals of the French language with practice in listening, reading, speaking, and writing. Includes selected studies in French culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

FREN 102 Elementary French II (A, W, SP, SU) 5 credits

Continuation of FREN 101, with further development of listening, reading, speaking, and writing skills and further study of French culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: FREN 101 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

FREN 103 Intermediate French I (A, W, SP, SU) 5 credits

Continued study of the French language and development of listening, reading, speaking, and writing skills. Readings from contemporary French culture and literature. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: FREN 102 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

FREN 104 Intermediate French II (W, SP, SU) 5 credits

Reading and discussion of French short stories, novels, plays, newspapers, and magazines, emphasizing literary appreciation and the development of French culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: FREN 103 with a grade of “C” or better or by placement exam

Lab fee: \$6.00.

FREN 290 Capstone Experience in French (On Demand) 3 credits

A capstone course focusing on French. Paradigms and their underlying assumptions will be explored. Students will work on developing research techniques and methodologies. Students will apply these techniques to a project of their own design, complete a personal portfolio covering their studies at Columbus State, and participate in summative testing of their academic skills.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters

Lab fee: \$5.00

FREN 299 Special Topics in French (On Demand) 1-5 credits

Detailed examination of selected topics in French.

Prerequisite: Varies

Lab fee: \$2.00

Geographic Information Systems (GIS)

GIS 100 Acquiring GIS Data (A, W, SP, SU,–DL) 3 credits

This course introduces students to acquiring geographic data and to learning to recognize and understand different data types used in the GIS applications. This course is designed for the beginning student who has limited knowledge in accessing existing databases. Students also develop skills for participating in distance learning courses and submitting class projects using the Internet.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$10.00

GIS 105 Elements of Photogrammetry (W) 2 credits

This course focuses on concepts and uses of photogrammetry in GIS. Students learn about the basic types of photogrammetry, examining ways of obtaining photographic data, finding points and performing measurements on aerial photographs, and understanding the limitations and applications.

Lecture: 1 hour – Lab: 3 hours

Lab fee: \$10.00

GIS 110 Scanning and Digitizing (W) 2 credits

This course explores data conversion of hard copy drawings, maps, and photographs into data files for use in a GIS using scanning and digitizing operations. Students understand different digitizing and scanning methods and errors associated with each method.

Lecture: 1 hour – Lab: 3 hours

Prerequisites: GEOG 207 or GIS 251 or instructor’s permission

Lab fee: \$10.00

GIS 130 Introduction to Spatial Analysis (SP) 4 credits

This course explores a range of spatial and analytical techniques and their implementation in GIS software. Students will apply different spatial techniques with the software and become familiar with the essential methodological and practical issues involved in spatial analysis.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: GEOG 207 or GIS251 or instructor’s permission

Lab fee: \$20.00

GIS 203 Remote Sensing of Environment (W) 4 credits

This course is designed to give students an understanding of the electromagnetic spectrum as used in remote sensing techniques and applications. Students learn to make decisions with remote sensed data.

Lecture: 3 hours – Lab: 3 hours

Lab fee: \$20.00

GIS 251 GIS Software I–ArcGIS (A, W,–DL) 3 credits

This course is the first in a two-part series of specific application software usage training using ESRI’s ArcGIS. The students will learn the basics of ArcMap, ArcCatalog and ArcToolbox and explore how these applications inter-relate in a complete GIS software solution. This course covers the fundamental GIS concepts as well as how to create, edit and work with spatial data. Students will manipulate, query, present data in maps and make decisions from the presented information.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$20.00

GIS 253 GIS Software II (W, SP,–DL) 3 credits

This course is second in a two-part series of specific application software

usage training using ESRI's ArcGIS. The students will learn the basics of ArcMap, ArcCatalog and ArcToolbox and explore how these applications interrelate in a complete GIS software solution. This course covers the advanced applications of the software and reinforces the important concepts and functionality for successfully working with ArcGIS.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: GIS 251

Lab fee: \$20.00

GIS 275 Planning and Implementing GIS (A, SP,–DL) 3 credits

This course focuses on the methodology for planning and implementing a GIS. This course examines the procedures and methods for designing a GIS, evaluating data sources, testing, hardware and software planning, cost benefit analysis, staffing, training, legal issues and system implementation.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$20.00

GIS 277 Introduction to ArcIMS (W,–DL) 3 credits

This course provides specific application software usage training using ESRI's ArcIMS. The students learn the basics of ArcIMS, how to create and maintain geography Internet sites, how to install and maintain ArcIMS, and explore and customize ArcIMS viewers.

Lecture: 1 hour – Lab: 4 hours

Prerequisite: GEOG 207 or instructor's permission

Lab fee: \$20.00

GIS 278 VBA Programming for GIS (SP,–DL) 3 credits

This course focuses on object-orientated programming and the unique issues relating to spatial objects, customization and syntax. Students learn how to use, find and modify Visual Basic scripts for use in ArcGIS. MapObjects will be introduced. Students should have some familiarity with ArcGIS.

Lecture: 1 hour – Lab: 4 hours

Prerequisite: GEOG 207 or instructor's permission

Lab fee: \$20.00

GIS 279 Introduction to GIS Databases (SP,–DL) 3 credits

This course focuses on the design, use and maintenance of a GIS database. Students will be introduced to structured query language (SQL) and SQL server as they relate to GIS databases. The course covers ArcGIS personal geodatabases and SDE software. Student should have some familiarity with ArcGIS.

Lecture: 1 hour – Lab 4 hours

Prerequisite: GEOG 207 or instructor's permission

Lab fee: \$20.00

GIS 280 Advanced GIS Applications (W, SP,–DL) 4 credits

This is a capstone course utilizing the skills and knowledge learned throughout the curriculum. Students perform research, identify issues, find data and develop a solution to a problem or project in a specific industry or area.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: GIS 253

Lab fee: \$20.00

GIS 281 Introduction to ArcGIS Server (W) 3 credits

This course provides specific application software training for ESRI's ArcGIS Server. Students will learn the components of ArcGIS Server, about the available libraries and APIs and server development guidelines, and the development of different types of Web applications. In the course, students will also learn how to install and configure ArcGIS Server. The course concludes with a project in which students will build a centrally managed GIS applications using ArcGIS Server.

Lecture: 1 hour – Lab: 4 hours

Prerequisite: GIS 251 or permission of instructor

Lab fee: \$20.00

GIS 283 GIS in Emergency Management (SP) 3 credits

This course is designed for members of the Emergency Management and Homeland Security communities. Students learn how to use ArcGIS tools to perform basic GIS tasks such as accessing, displaying, querying, and editing geographic data. In the course, students will learn the core GIS skills they need to support their organizations' missions using terminology, exercise scenarios, and data relevant to homeland security. The course concludes with project in which students independently apply what they have learned to work through a particular emergency management scenario.

Lecture: 1 hour – Lab: 4 hours

Prerequisite: GIS 251 or permission of instructor

Lab Fee: \$20.00

GIS 290 Seminar for GIS (SP, SU, On Demand,–DL) 1 credit

Application of business knowledge to specific areas of on-the job work experience. The student takes this course concurrently with GIS 291.

Lecture: 1 hour – Lab: 0 hours

Lab fee: \$5.00

GIS 291 GIS Practicum (SP, SU, On Demand) 4 credits

Off-campus work experience in GIS that augments formal education received in the technology, with actual work conditions and job experience. "N" credit will not be allowed for this course. This student takes this course concurrently with GIS 290.

Lecture: 0 hours – Lab: 28 hours

Lab fee: \$15.00

GIS 299 Special Topics in GIS (On Demand) 1-5 credits

Special topics in GIS to meet needs of the GIS community.

Lecture: 1-5 hour – Lab: 1-5 hours

Lab fee: \$15.00

Geography (GEOG)

Students who enroll in geography courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling a geography course.

GEOG 200 World Regional Geography (A, W, SP, SU,–DL)

5 credits

This course serves as an introduction to the study of regional geography at the global scale. Students will become familiar with the basic concepts in geography, the topic of uneven development, and the factors (landforms, climate, population, resources, culture, economic activity, and historical evolution) that affect uneven development within and among all the world's major regions.

A distance-learning version of World Regional Geography is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

GEOG 207 Introduction to Geographic Information Systems (A, W, SP, SU,–DL) 5 credits

This course introduces the fundamentals of Geographic Information Systems (GIS) including basic cartographic principles, map scales, coor-

dinate systems, and map projections. The uses of hardware and software elements that emphasize vector-based data structures using ArcView Spatial Analysis extension are explored. Various applications of GIS technology used in science, business, and government are presented. Specific topics addressed include GIS terminology, raster and vector data structures, data sources and accuracy, methods of data conversion and input, requirements for metadata, working spatial databases (map features and attribute tables), spatial analysis (map overlays, buffers, networks). The above topics are reinforced in a laboratory with hands-on exercises on the use of map scales, coordinate systems, data sources and accuracy, data structures, working with spatial data, map features and attributes, map overlays, manipulation of data bases, creation of charts and graphs, and presentation of data in map overlays. A distance-learning version of Introduction to GIS is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 3 hours – Lab: 4 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

GEOG 280 Elements of Cartography (A, W, SP, SU,–DL) 5 credits

This course provides an in-depth introduction to the basic concepts and methods of cartography necessary to design and construct digital maps. Upon completion of the course, students should have a basic understanding of maps and how to design and construct them in order to provide a tool useful for other courses and later professional work.

A distance-learning version of Elements of Cartography is available. Students taking the web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 3 hours – Lab: 4 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

GEOG 290 Capstone Experience in Geography (On Demand)

3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have a special interest in continuing a baccalaureate degree program in geography. The course presents a basic introduction to geography research methodologies that students apply in researching a social science topic of interest. Course requirements include the assembly of a portfolio that covers student's academic career at Columbus State Community College and participation in summative testing of academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: Completion of AA/AS core requirements AND at least 75 hours toward the degree with five credit hours in Geography

Lab fee: \$5.00

GEOG 293 Independent Study in Geography (On Demand)

1 to 5 credits

An individual, student-structured course that examines a selected topic in geography through intensive reading or research. The independent study elective permits a student to pursue his/her interests within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Permission of the instructor and the chairperson and one course in Geography

Lab fee: \$5.00

GEOG 299 Special Topics in Geography (On Demand)

1 to 5 credits

A detailed examination of selected topics of interest in geography.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Varies

Lab fee: \$5.00

Geology (GEOL)

Students must complete 60% of the laboratories in a course to receive credit. Courses in this area may require additional hours outside of the scheduled class times.

GEOL 101 Earth Systems I: Geologic Environment

(A, W, SP, SU)

5 credits

A general geology course covering the materials of the Earth's crust, the processes that produce and modify them, and the development of the Earth and its life forms through time. Related laboratory and demonstrations.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: Placement into ENGL 101; not open to students with credit for GEOL 121

Lab fee: \$21.00

GEOL 121 Physical Geology (A, W, SP, SU)

5 credits

This course covers geologic processes and the development of land forms. Topics include the development of the Earth, the nature and origin of minerals and rocks, land forms and the agents that produce and modify them, structural features of the Earth's crust, and the environmental effects of changes in the Earth. Related laboratory and demonstrations.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: MATH 103 and placement into ENGL 101

Lab fee: \$20.00

GEOL 122 Historical Geology (W, SU)

5 credits

The history of the Earth and its inhabitants through geologic time.

Recommended second course in geologic science for two course sequence in physical sciences for the AS degree. Related laboratories and demonstrations. Field trips outside normal class time may be required.

Lecture: 4 hours – lab 3 hours

Prerequisites: Geology 121

Lab fee: \$ 26.00

GEOL 293 Independent Study in Geology (On Demand) 1 to 5 credits

Detailed examination of selected topics of interest in geology.

Lecture: 1 to 5 hours – Lab: 0 to 6 hours

Prerequisite: Permission of instructor

Lab fee: Varies

GEOL 299 Special Topics in Geology (On Demand) 1 to 5 credits

Detailed examination of selected topics of interest in geology.

Lecture: 1 to 5 hours – Lab: 0 to 6 hours

Prerequisite: Permission of the instructor

Lab fee: Varies

German (GERM)

GERM 101 Elementary German I (A, W, SP, SU)

5 credits

Introduction to the fundamentals of the German language with practice in listening, reading, speaking and writing. Includes selected studies in German culture. Meets elective requirements in the Associate of Arts and

Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

GERM 102 Elementary German II (A, W, SP, SU) 5 credits

Continuation of GERM 101 with further development of listening, reading, speaking, and writing skills and further study of German culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: GERM 101 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

GERM 103 Intermediate German I (A, SP) 5 credits

Continued study of the German language and development of listening, reading, speaking, and writing skills. Readings from contemporary Germanic culture and literature. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: GERM 102 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

GERM 104 Intermediate German II (W, SU) 5 credits

Reading and discussion of German short stories, novels, plays, newspapers, and magazines, emphasizing literary appreciation and the development of Germanic culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: GERM 103 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

GERM 290 Capstone Experience in German (On Demand) 3 credits

A capstone focusing on German. Paradigms and their underlying assumptions will be explored. Students will work on developing research techniques and methodologies. Students will apply these techniques to a project of their own design, complete a personal portfolio covering their studies at Columbus State, and participate in summative testing of their academic skills.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters

Lab fee: \$5.00

GERM 299 Special Topics in German (On Demand) 1-5 credits

Detailed examination of selected topics in German.

Prerequisite: Varies

Lab fee: \$2.00

Health Information Management Technology (HIMT)

HIMT 111 Introduction to Health Information Management Tech (SU,–DL) 2 credits

The student will be introduced to the various roles of the health information management technician within the health care system and professional organizations in which the health information management technician

is affiliated. The student will explore the various functions performed under the auspices of health information management and the technology used to perform these functions. This course must be completed as a prerequisite to starting the HIMT degree program or the Medical Coding Certificate program.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: Acceptance into the HIMT degree program or the Medical Coding Certificate program.

Lab fee: \$10.00

HIMT 112 Electronic Health Concepts (SU,–DL) 2 credits

This course discusses electronic health concepts as they relate to safety and quality of healthcare, homeland security, HIPAA, and escalating healthcare costs. These national concerns have brought the electronic health record (EHR) to the forefront of the healthcare industry and have created several initiatives that are driving the standardization and implementation of the EHR and EHR systems.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$15.00

HIMT 113 Managed Care Trends (A,–DL) 2 credits

This course will provide students with an understanding of various issues regarding managed care that have been instrumental in the redesign and remodeling of patient care delivery. Topics discussed include types of plans, analysis of data to determine effects of managed care, evaluation of managed care plans, rules and regulations affecting managed care, implementation of plans, and clinical outcomes management.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$10.00

HIMT 121 Advanced Medical Terminology (A, W, SP, SU–DL) 3 credits

The student will study medical terminology as it relates to word parts, human body structure, procedural terms, abbreviations, directional terms, anatomical planes and regions, and the following: integument system, musculoskeletal system, hematology, immune system, endocrine system, nervous system, special senses, respiratory system, cardiovascular system, gastrointestinal system, urinary system, male reproductive system, female reproductive system, obstetrics and neonatology, mental health, and oncology. Recommended completion of MULT 101–Medical Terminology.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$10.00

HIMT 133 Legal Aspects of Health Information (SP,–DL) 3 credits

The student will study the policies and procedures for processing health records for legal purposes. The importance of the maintenance of confidentiality of health information (both paper and electronic records and databases), the proper handling of requests for, and the transfer of health information will be discussed.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: HIMT 111 with a grade of “C” or higher.

Lab fee: \$10.00

HIMT 135 Health Data Management (A,–DL) 5 credits

The student will be introduced to filing systems as well as the computer-based patient record (CPR). The student will study the policies and procedures required to collect, analyze, interpret, report, and maintain health care data. The student will perform clinical pertinence chart reviews and also be introduced to the internal and external requirements for establishing, operating, and maintaining various registers and registries.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: HIMT 111 with a grade of “C” or higher.

Lab fee: \$15.00

HIMT 141 Pharmacology for HIMT (W, SP,–DL) 3 credits

This course will survey the major classifications of drugs. The indications and contraindications for use will be presented. Emphasis will be placed on the correlation between drug therapy and disease. The student will

be required to use various desk references efficiently. Recommended completion of HIMT 121.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: BIO 121 or (BIO 261 and BIO 262) with a grade of “C” or higher

HIMT 243 Comparative Health Settings in HIM (SP,-DL) 3 credits

The student will study health information systems in nonhospital health care facilities along with the sources of data for these systems and their uses and users. The appropriate technical aspects and functions within these various systems will be discussed along with the various reporting and accrediting requirements for each of the specific health care facilities discussed. Field trips to various health care facilities will be scheduled.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: HIMT 111 and HIMT 135 with a grade of “C” or higher
Lab fee: \$10.00

HIMT 245 ICD-9-CM Coding (A, SP,-DL) 5 credits

The student will be introduced to the nomenclature and major classification and indexing systems in ICD-9-CM utilized in coding medical information. Laboratory experiences will emphasize the application of the related skills with accuracy and completeness.

Lecture: 3 hours – Lab: 4 hours

Prerequisites: BIO 122 or (BIO 261, BIO 262, and BIO 263), HIMT 111 and HIMT 121 with a grade of “C” or higher
Lab fee: \$35.00

HIMT 245A Introduction to ICD-9-CM Coding (A, SP,-DL) 1 credit

HIMT 245A is the first module of HIMT 245. In this module, students are introduced to basic ICD-9-CM coding guidelines and conventions.

Lecture: 1 hour – Lab: 0 hours

Lab fee: \$5.00

HIMT 255 CPT-4 Coding (W, SU,-DL) 5 credits

The student will be introduced to ambulatory coding and payment systems emphasizing CPT-4 coding. Laboratory experiences will emphasize the application of the related skills with accuracy and completeness.

Lecture: 3 hours – Lab: 4 hours

Prerequisites: BIO 122 or (BIO 161, BIO 169, and BIO 170), HIMT 111 and HIMT 121 with a grade of “C” or higher
Lab fee: \$35.00

HIMT 255A Intro to CPT-4 and Evaluation and Management (W, SU,-DL) 1.5 credits

HIMT 255A is the first module of HIMT 255. In this module, students are introduced to basic CPT-4 coding guidelines and Evaluation and Management coding.

Lecture: 1 hour – Lab: 1 hour

Lab fee: \$10.00

HIMT 256 Clinical Data Analysis (W,-DL) 3 credits

The student will study clinical information used to support diagnoses and services provided to patients as it pertains to health care data management in coding for reimbursement of health care services, the evaluation of practice patterns, the assessment of clinical outcomes, and the analysis of cost-effectiveness of services provided.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: HIMT 121 with a grade of “C” or higher

HIMT 257 Introduction to Health Statistics (SP,-DL) 3 credits

The student is introduced to procedures for properly collecting, organizing, displaying, and interpreting health care data to meet the needs of various users while complying with the standards of the health care facility. The users of data can include the patient, medical staff, nursing and allied health staff, state and federal regulatory agencies, JCAHO, and insurance companies.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: CIT 102, HIMT 111, and 135 with a grade of “C” or higher or permission from the instructor for those not enrolled in the HIMT
Lab fee: \$5.00

HIMT 259 Quality and Resource Management (A,-DL) 3 credits

The student will be introduced to the internal and external requirements for establishing, operating, and maintaining quality improvement and utilization management programs. Accreditation standards pertaining to quality of health information will be discussed along with methods used in bench marking, credentialing, critical pathways, monitoring and evaluation, occurrence screening, peer review, and risk management.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: CIT 102, HIMT 111, and HIMT 257 with a grade of “C” or higher
Lab fee: \$5.00

HIMT 265 Medical Reimbursement (A,-DL) 3 credits

Students are introduced to basic terminology regarding medical insurance and how coding systems used in outpatient and inpatient health care settings are used to obtain payment for health care services. A discussion of various third party payers will be presented as well as reimbursement methodologies used by these payers. Students are introduced to claims processing in the physicians’ office setting. Topics discussed include CMS 1500 and office procedures for posting payments and claims follow-up.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$35.00

HIMT 267 Principles of Management (W,-DL) 3 credits

The student will be introduced to the functions related to planning, organizing, controlling, and evaluating human resources and health information management services. Other topics include the direction and documentation necessary for the supervision of personnel.

Lecture: 3 hours – Lab: 0 hours

HIMT 270 Case Management in Health Care (W,-DL) 2 credits

This course is designed to introduce the student to the role of the case manager. The five major areas of discussion include coordination and service delivery, physical and psychological factors, benefit systems and cost benefits analysis, case management concepts, and community resources.

Lecture: 2 hours

HIMT 274 Issues in Health Information Management Technology (SP,-DL) 1-3 credits

This special topics course is designed to provide presentation of topics pertinent topics and current trends in the health information management field.

Lecture: 1-3 hours – Lab: 0 hours

Prerequisite: Varies with topic offered

HIMT 275 Intermediate Coding (A,-DL) 4 credits

This course provides the students with continued experience in ICD-9-CM and CPT-4 Coding. An emphasis is placed on practical applications of professional coders. The students will code from case studies and patient medical records and participate in group discussions regarding code assignment and reimbursement issues. Note: Successful completion of the coursework in the Medical Coding Certificate required for this course.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: HIMT 111, 245, 255, 256, and 265 with a grade of “C” or higher

Lab fee: \$35.00

HIMT 276 Medical Coding Practicum (W) 3 credits

The student is assigned to a facility to gain practical experience in the area of medical coding/reimbursement. The student will obtain exposure to actual working conditions at the assigned facility. Emphasis of the practicum will be the actual coding experience.

Lecture: 1 hours – PR: 14 hours

Prerequisites: HIMT 111, 245, 255, and 265, 275, and successful completion of all coursework in the Medical Coding Certificate program with a grade of “C” or higher and permission from the instructor. Completion of a health record, a 2-step TB test, a clear BCI check, and a clear drug screen are also required.

HIMT 290 HIM Seminar for Medical Coding Certificate Completers (W) 1 credit

This course is intended for students who have previously completed HIMT 276 in the Medical Coding Certificate program and have completed the coursework in quarters 1-5 of the HIMT degree program. This course is designed to provide a review for students of all the domains, tasks, and subtasks applicable to the Registered Health Information Management Technician (RHIT).

Lecture: 1 hour – Lab: 0 hours

Prerequisites: HIMT 276, HIMT 292 and HIMT 294 with a grade of “C” or higher

HIMT 292 Clinical Practicum I (SU) 3 credits

Students are assigned to area health care facilities to work under the supervision of facility personnel. Students will obtain exposure to actual working conditions and gain experience in various aspects of health information management services. Students will meet to share clinical experiences with classmates and prepare for the RHIT certification examination.

Lecture: 1 hours – PR: 14 hours

Prerequisites: CIT 102, HIMT 111, HIMT 121, HIMT 133, HIMT 135, HIMT 243 and HIMT 245 with a grade of “C” or higher and permission from the instructor. Completion of a health record, a 2-step TB test, a clear BCI check, and a clear drug screen are also required.

Corequisite: HIMT 255

HIMT 294 Clinical Practicum II (A) 3 credits

Students are provided with practical applications of the knowledge and techniques needed to perform various functions in a health information environment. Students will meet to share clinical experiences with classmates and prepare for the RHIT certification examination.

Lecture: 1 hours – PR: 14 hours

Prerequisites: HIMT 245, HIMT 255, HIMT 257 and HIMT 292 with a grade of “C” or higher and permission from the instructor. Completion of a health record, a 2-step TB test, a clear BCI check, and a clear drug screen are also required.

Corequisites: HIMT 259 and 265

HIMT 296 Clinical Practicum III (W) 3 credits

Continued clinical experience in health information services. Students will meet to share clinical experiences with classmates and prepare for the RHIT certification examination.

Lecture: 1 hours – PR: 14 hours

Prerequisites: HIMT 275 and HIMT 294 with a grade of “C” or higher and permission from the instructor. Completion of a health record, a 2-step TB test, a clear BCI check, and a clear drug screen are also required.

Heating, Ventilating and Air Conditioning Technology (HAC)

HAC 116 Piping Systems, (W, SU) 3 credits

A comprehensive study of the UPC, water supply, water treatment, and distribution, to include waste water disposal and sanitation standards. Emphasis will be placed on mechanical piping design, nomenclature, the physics of metal pipe, tubing, fittings, valves, joining methods, pumps, pump sizing, water flow principles, pressure loss, sizing and terminal units. Boilers, furnaces, chillers and refrigerator systems will be discussed in

detail.

Lecture: 1 hour – Lab 5 hours

Lab fee \$12.00

HAC 141 Principles of Refrigeration (A, W) 4 credits

A basic refrigeration cycle theory course covering heat thermodynamics, temperature-pressure relationships, mechanical operations of refrigeration equipment and representative application and selection data for class I refrigerants.

Lecture: 3 hours – Lab: 3 hours

Lab fee: \$10.00

HAC 152 Instrumentation/Combustion Process (A, W) 4 credits

A course about basic combustion processes using all the fossil fuels and psychrometric chart work to track the thermal heat transfer. The instruments used to test these processes will also be explained along with the fan laws and psychrometric chart procedures. Instruments used in energy auditing are then explained and preventative maintenance programs written.

Lecture: 2 hours – Lab: 4 hours

Lab fee: \$15.00

HAC 161 Hand Tools Laboratory (A, SP) 4 credits

An entry-level course building elementary skills in brazing, soldering, threading, cutting, swaging, and other skills that relate to service, installation and maintenance processes in the HAC field. Basic hand tools and meters will be demonstrated and used in lab exercises.

Lecture: 2 hours – Lab: 4 hours

Lab fee: \$15.00

HAC 183 HAC Wiring Circuits I (A, W) 4 credits

This course is designed to teach a new student how to read, draw, interpret and understand residential heating and cooling wiring diagram symbols, devices and wire size identification, basic circuit distribution concepts and schematic applications of same.

Lecture: 2 hours – Lab: 4 hours

Lab fee: \$10.00

HAC 222 Load Calculations I (A, W) 4 credits

This course is a comprehensive study of the fundamentals of environmental conditioning, energy consumption and operating cost analysis, the properties of air, insulation materials, heat loss and gain calculations, to include the methods of air conditioning, heating and ventilation. Load calculations will be performed using the applicable ACCA manuals and the Right-J, Windows Version 2, computer software program.

Lecture: 2 hours – Lab: 4 hours

Lab fee: \$12.00

HAC 231 Load Calculations II (W, SP) 4 credits

A course covering commercial heat gain/loss calculations, design of systems, and selection of equipment. The systems used in commercial applications will be discussed and compared, along with correct balancing procedures. The factor of sound as it applies to these types of systems will also be included. This course is one of six that prepares the student to take the HAC Contractor’s License Exam.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: HAC 222

Lab fee: \$12.00

HAC 242 HAC Mechanical Standards/Safety (A, SP) 3 credits

A basic introduction to HAC safety considerations, first aid, and CPR as well as emergency procedures for on-the-job accidents. An introduction to the various codes that effect the workplace and jobsite, such as OSHA, NFPA, state and local building codes. NEC, energy codes and ASHRAE standards will also be covered.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: ARCH 116, HAC 141 and HAC 152

Lab fee: \$12.00

HAC 243 Air Conditioning Systems (SP, SU) 4 credits

A course designed for the student with a fundamental knowledge of the refrigeration cycle. Previous training in refrigeration theory, wiring diagrams, control circuits, and tools used in the trade are necessary to enroll in this course. The course is designed around hands-on training and testing of the various component parts of a vapor compression split system

Lecture: 2 hours – Lab: 6 hours

Prerequisites: ARCH 116, HAC 141, 161, 183 and 253

Lab fee: \$20.00

HAC 244 Heat Pump Systems (SP, SU) 4 credits

A course designed for the student with a fundamental knowledge of the air conditioning and heating processes. Previous training in refrigeration cycle, wiring diagrams, control circuits, and tools used in the trade are necessary to enroll in this course. The course is structured around hands-on training on the various component parts of an air cycle heat pump system.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: ARCH 116, HAC 141, 161, 183 and 253

Lab fee: \$20.00

HAC 253 Automatic Controls I (A, SP) 3 credits

A course introducing HAC residential and light commercial control systems and the components that make up the systems. Emphasis will be placed on operators, sensors, controllers and various pneumatic and electrical devices used in modern control systems along with the logic used to develop their control sequences.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: HAC 141, HAC 152 and HAC 183

Lab fee: \$20.00

HAC 254 Heating Systems (A, SU) 4 credits

A course designed for the student with a fundamental knowledge of heat transfer characteristics and air movement properties. The course is designed around hands-on training and testing of the various component parts and accessories that make up gas, electric and fuel oil type forced air furnaces, along with accessories such as humidifiers, air filtration systems, and set-back thermostats.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: HAC 152, HAC 161 and HAC 183

Lab fee: \$20.00

HAC 256 Automatic Controls II (W, SU) 3 credits

A hands-on laboratory course designed to build practical understanding of control circuit logic and sequence of operation theory. Representative circuits from major environmental control devices employing various forms of energy will be included in the lab exercises.

Lecture: 1 hour – Lab: 5 hours.

Prerequisite: HAC 253

Lab fee: \$15.00

HAC 258 Pneumatic Controls I (SU) 4 credits

This course is designed to take a senior level HAC student and teach him/her the fundamentals, installation practices and common application parameters of representative pneumatic controls systems.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: HAC 253

Lab fee: \$15.00

HAC 266 Advanced Problems (A, W, SP, SU) 4 credits

A simulation that will allow the student to use their educational knowledge in a problem or problems that emphasizes the design or practical service aspects of a heating and cooling system. The instructor will need to give prior approval of the project or projects to be completed by the student. A tutorial course form must be completed by the student.

Lecture: 0 hours – Lab: 8 hours

Prerequisite: Permission of instructor

Lab fee: \$8.00

HAC 284 HAC Wiring Circuits II (W, SP) 4 credits

This course will concentrate on lab experiments designed to teach a student how to properly wire up typical heating and cooling devices into working circuits. Devices such as motors, controllers, contactors, compressors and safety devices will be covered.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: HAC 183

Lab fee: \$15.00

HAC 285 HAC Electronic Controls I (SU) 4 credits

This course uses basic electronic knowledge from EET 101 and EET 102, plus electrical knowledge from HAC 183 and HAC 284, to build a basic understanding of HAC solid state computer controls. This theory course will cover controllers, sensors, relays and HAC electronic operational devices.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: HAC 284

Lab fee: \$10.00

HAC 287 Boiler Systems (W) 4 credits

This course uses basic combustion knowledge from HAC 152 and piping system knowledge from ARCH 116, along with codes from course HAC 242, to build a basic understanding of boiler types, systems, safety procedures and codes that will prepare a person to take the High Pressure Boiler License Examination.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: ARCH 116 and HAC 152

Lab fee: \$10.00

HAC 288 Commercial A/C Systems (W) 4 credits

This course uses basic piping knowledge from ARCH 116, refrigeration cycle theory from HAC 141, codes from HAC 242 and control knowledge from HAC 253 to build a basic understanding of the operational theory and safe operating practices for an industrial Class II ammonia refrigeration system. Entering students should have HAC 161 course content or proficiency credit before enrolling in this class

Lecture: 3 hours – Lab: 2 hours

Prerequisites: ARCH 116, HAC 141, HAC 242 and HAC 253

Lab fee: \$10.00

HAC 291 Field Experience (SU) 4 credits

Off-campus work experience in heating, venting and air conditioning industry that augments formal education received in the technology with actual work conditions and job experience. "N" credit will not be allowed for this course.

Lecture: 0 hours – Lab: 40 hours

Lab fee: \$15.00

HAC 299 Special Topics in Heating and Air Conditioning (On Demand) 1 - 5 credits

A refresher maintenance training class covering refrigeration systems, mechanical tools and methods, heating and boilers, electrical, air handling and ventilation, controls and safety. Please see your advisor before scheduling for this course.

Lecture: Hours vary – Lab: Hours vary (depends upon topic)

History (HIST)**HIST 290 Capstone Experience in History (On Demand) 3 credits**

A capstone course focusing on history. Students will work on developing techniques and methodologies in the field of history. Students will apply these techniques to a project of their own design, and participate in summative testing of their academic skills.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Open only to AA and AS students preparing to graduate within two academic quarters
Lab fee: \$2.00

Hospitality Management

Dietetic Technician Major (DIET)

DIET 191 Dietetic Technician Practicum I (A) 1.4 credits

Practical application of information presented in the classroom from MLT 100, HOSP 102, and HOSP 122 to related healthcare facilities. Skills are developed through supervised learning situations to understand the organizational structure of healthcare facilities and the regulations that pertain, to define the roles of dietetic practitioners, and to maintain and evaluate standards of sanitation and safety. Student must be enrolled in or have completed MLT 100, HOSP 102, HOSP 122.

Lecture: 1 hour – Lab: 2.5 hours

Prerequisite: Permission of instructor

Lab fee: \$60.00

DIET 192 Dietetic Technician Practicum II (W) 2 credits

Practical application of information presented in the classroom from HOSP 107 and HOSP 109 in related healthcare facilities. Skills are developed through supervised learning situations to operate and maintain foodservice equipment, to assist in food production and service, and to maintain food quality and portion control. Student must be enrolled in or have completed HOSP 107 and HOSP 109.

Lecture: 1 hour – Lab: 7 hours

Prerequisite: DIET 191 with a “C” grade or higher and permission of instructor

Lab fee: \$20.00

DIET 193 Dietetic Technician Practicum III (SP) 2 credits

Practical application of information presented in the classroom from HOSP 123 and HOSP 153 in related healthcare facilities. Skills are developed through supervised learning situations to procure and store food, supplies, and equipment, to calculate food costs, to participate in quantity food production, to develop and/or test products, and to provide for the nutritional needs of customers. Student must be enrolled in or have completed HOSP 123 and HOSP 153.

Lecture: 1 hour – Lab: 7 hours

Prerequisite: DIET 192 with a “C” grade or higher and permission of instructor

Lab fee: \$15.00

DIET 261 Community Nutrition: A Life Cycle Approach (A) 2 credits

An introduction to community nutrition programs. Nutrition interventions targeted toward various population groups throughout the human life cycle are identified. Food and nutrition requirements for specific age groups and cultural preferences for foods are examined. The course explores overall program goals, delivery and evaluation, target audiences, funding sources, legislation, and nutrition goals for a variety of community programs. Local, state, and federal food and nutrition programs are addressed. The various roles of the nutritionist/nutrition educator in the community setting are identified.

Lecture: 2 hours

Prerequisite: HOSP 153 with a “C” grade or higher

Lab fee: \$10.00

DIET 263 Nutrition Care Process (A) 2 credits

An introduction to the study of nutritional assessment, diet modification, and nutritional care plans. Methods and management of clinical documentation will be emphasized. The student will utilize appropriate nutritional assessment tools and techniques and develop care plans and chart notes for various disease states utilizing the Nutrition Care Process

and model.

Lecture: 2 hours

Prerequisite: HOSP 153–Nutrition for a Healthy Lifestyle with a minimum grade of “C”

Lab Fee: \$10.00

DIET 265 Dietetic Technician Seminar (SP) 1 credit

An in-depth study of recent developments and areas of concern related to providing nutrition care. Each student will select a nutrition topic of current concern, write a research paper and present an oral report. Information about professional organizations and the ethical practice of dietetics will be discussed. A written exam to assess knowledge attained throughout the seven quarter program will be administered. A grade of “C” or higher is required for graduation.

Lecture: 1 hour

Prerequisite: DIET 298 with a “C” grade or higher and permission of instructor

Lab fee: \$2.00

DIET 275 Medical Nutrition Therapy I (A) 5 credits

An introduction to the study of nutritional assessment, diet modification, and nutritional care plans. The rationale for nutritional intervention and related medical conditions and terminology is presented. Calorie controlled and consistency and nutrient modified diets for a variety of medical and/or life cycle-related conditions are studied. The student will identify and utilize appropriate nutritional assessment tools and techniques for specific medical and/or life cycle-related conditions. The student will plan, prepare and/or evaluate menus, meal plans, meals, and nutritional supplements related to these diet modifications. BIO 262 or BIO 122 must be completed or taken as a corequisite.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: HOSP 153 with a “C” grade or higher and permission of instructor

Lab fee: \$10.00

DIET 276 Medical Nutrition Therapy II (W) 5 credits

A continuation of the study of nutritional assessment, diet modification, and nutritional care plans. The rationale for nutritional intervention and related medical conditions and terminology is presented. Calorie and protein supplemented and nutrient modified diets for a variety of medical conditions are studied. The student will identify and utilize appropriate nutritional assessment tools and techniques for specific medical conditions. The student will plan, prepare and/or evaluate menus, meal plans, meals, and nutritional supplements related to these diet modifications. BIO 262 or BIO 122 must be completed before enrolling.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: DIET 275 with a “C” grade or higher and permission of instructor

Lab fee: \$10.00

DIET 297 Dietetic Technician Practicum IV (A) 3 credits

Practical application of information presented in the classroom from HOSP 153 and DIET 275 in community health programs. Skills are developed through supervised learning situations to understand the services offered by community based organizations, to develop the ability to utilize their services, to meet and serve clients, to obtain and evaluate nutritional data from individuals, and to establish good working relationships with clients and other personnel. Student must be enrolled in or have completed HOSP 225 and DIET 275.

Lecture: 2 hours – Lab: 7 hours

Prerequisite: DIET 193 with a “C” grade or higher and permission of instructor

Lab fee: \$55.00

DIET 298 Dietetic Technician Practicum V (W) 2 credits

Practical application of information presented in the classroom from HOSP 225, DIET 275, and DIET 276 to clients in related healthcare facilities. Skills are developed through supervised learning situations to interview

clients, to evaluate nutritional data collected, to understand the rationale for dietary modification for nutrient and consistency modification, to understand associated medical terminology and to assist in the planning, preparation and service of modified diet meals. Student must be enrolled in or have completed DIET 276 and HOSP 224.

Lecture: 1 hour – Lab: 7 hours

Prerequisite: DIET 297 with a “C” grade or higher and permission of instructor

Lab fee: \$10.00

DIET 299 Dietetic Technician Practicum VI (SP) 2.5 credits

Practical application of information presented in the classroom from all technical courses to clients in related health care facilities. Opportunities are provided through supervised learning situations to demonstrate proficiency in client interviewing, to evaluate nutritional data, to understand associated medical terminology and the rationale for dietary intervention, and to assist in the planning, preparation and service of modified diet meals. A grade of “C” or higher is required for graduation.

Lecture: 1 hour – Lab: 10.5 hours

Prerequisite: DIET 276 and DIET 298 and permission of instructor

Lab fee: \$10.00

Dietary Manager (DMGR)

DMGR 101 Dietary Manager Seminar I (A) 4 credits

A study of the types of healthcare facilities, typical healthcare organizational structures, and roles of the healthcare team members. Regulations and how they affect food service in healthcare facilities are examined. Methods and records used in purchasing, receiving, storing, preparing and serving food are explained. Management principles and employment issues are discussed. The student must have passed the ServSafe examination before enrolling.

Lecture: 4 hours

Corequisite: DMGR 194 and permission of instructor

DMGR 102 Dietary Manager Seminar II (W) 4 credits

A study of the principles for planning menus to meet the nutritional needs of people in healthcare operations. Nutrient requirements, functions and sources of nutrients, and digestion and absorption of food are studied. Diet modification for a variety of health conditions is studied.

Lecture: 4 hours

Prerequisite: DMGR 101 with a “C” grade or higher

Corequisite: DMGR 195 and permission of instructor

DMGR 103 Dietary Manager Seminar III (SP) 4 credits

Methods and records used to gather nutrition histories, to determine food needs and preferences, to establish care plans and to do charting are presented. Control measures for maintaining quality, quantity, and cost of nutrition care are discussed. Supervisory characteristics are reviewed. Facility evaluation and plans for improvement are presented. Continued professional development is emphasized. The student must earn a grade of “C” or higher to receive a certificate of completion.

Lecture: 4 hours

Prerequisite: DMGR 102 with a “C” grade or higher

Corequisite: DMGR 196 and permission of instructor

DMGR 194 Dietary Manager Cooperative Work Experience I (A) 2 credits

Supervised work related learning experiences to be performed on the job following material presented in the classroom from DMGR 101. Employment in a healthcare facility with a qualified preceptor on the staff is required.

Lab: 20 hours/week

Corequisite: DMGR 101 and permission of instructor.

Lab fee: \$12.00

DMGR 195 Dietary Manager Cooperative Work Experience II (W) 2 credits

Supervised work related learning experiences to be performed on the job following materials presented in the classroom from DMGR 102. Employment in a healthcare facility with a qualified preceptor on the staff is required.

Lab: 20 hours/week

Prerequisite: DMGR 194 with a “C” grade or higher

Corequisite: DMGR 102 and permission of instructor

Lab fee: \$12.00

DMGR 196 Dietary Manager Cooperative Work Experience III (SP) 2 credits

Supervised work related learning experiences to be performed on the job following materials presented in the classroom from DMGR 103. Employment in a healthcare facility with a qualified preceptor on the staff is required. The student must earn a grade of “C” or higher to receive a certificate of completion.

Lab: 20 hours/week

Prerequisite: DMGR 195 with a “C” grade or higher

Corequisite: DMGR 103 and permission of instructor

Lab fee: \$12.00

School Foodservice Manager (SMGR)

SMGR 101 Introduction to School Foodservice Management (W) 3 credits

A study of the history of school meals, typical organizational structures, and roles of the foodservice team members. Regulations and how they affect foodservice in schools are examined. Foodservice safety and sanitation principles, utilization and care of equipment are studied. Foodservice systems, marketing, customer service and merchandising techniques are examined.

Lecture: 3 hours

Prerequisites: HOSP 122

SMGR 102 School Nutrition and Menu Planning (SP) 4 credits

A study of the principles for planning menus to meet the nutritional needs of school age children. Nutrition requirements, functions and sources of nutrients and the digestion and absorption of food are studied. Diet modification for a variety of health conditions is studied. Food preparation techniques for menu components are studied.

Lecture: 4 hours

Prerequisite: SMGR 101 with a grade of “C” or higher

SMGR 103 School Foodservice Management/Human Resources (SU) 4 credits

An explanation of methods and records used in procurement, receiving, and storage of food and related items. Inventory control/methods are studied. Control measures for maintaining quality, quantity, and cost of food production are discussed. Financial management, record keeping and budgets are studied. Management principles, interpersonal skills, employee development and supervisory characteristics are discussed. Facility evaluation and planning for improvements is presented.

Lecture: 4 hours

Prerequisite: SMGR 102 with a grade of “C” or higher

Hospitality Management (HOSP)

HOSP 101 Survey of the Hospitality/Tourism Industry (A, W, SP, SU) 3 credits

A comprehensive look at the fascinating and challenging related fields in the hospitality industry: travel and tourism; lodging; food service, meetings, conventions and expositions; leisure and recreation. Customer service is emphasized, while guest speakers, field trips, and study

of trade publications provide information on industry trends and career opportunities.

Lecture: 3 hours

HOSP 102 Foodservice Equipment (A, W, SP, SU) 2 credits

A course in which students will learn to operate, clean and describe preventive maintenance of commercial foodservice equipment and apply that knowledge in a laboratory setting. Basic knife skills and cooking techniques, following sanitation and safety guidelines, will be practiced. Appropriate uses for equipment and general equipment layout for safety, sanitation and efficiency will be discussed.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$17.00

HOSP 106 Food Laboratory I (W, SU) 3 credits

A laboratory course for registered Chef Apprentices. The course includes preparation of stocks, soups, sauces, entrees, starches, vegetables, fruits and breakfast items. Also includes butchery, fish filleting and poultry deboning. Students will develop and cost recipes, plan menus, requisition food, and prepare menu items.

Lecture: 1 hour – Lab: 4 hours

Prerequisites: HOSP 102, HOSP 122, and HOSP 107

Lab fee: \$60.00

HOSP 107 Food Principles (A, W, SP) 5 credits

A course in basic food preparation including the terminology and definitions used and the scientific principles involved in preparing food products. The course includes a detailed study of the principles of preparation and selection criteria for all categories of foods served in foodservice operations.

Lecture: 5 hours

Lab fee: \$5.00

HOSP 109 Food Production (W) 3 credits

A laboratory course in which students will produce and serve marketable food products according to standardized recipes using food production equipment in a commercial kitchen environment. The products will be served in a dining room setting, with emphasis on customer service. The principles of safety and sanitation will be applied.

Lecture: 1 hour – Lab: 7 hours

Prerequisites: HOSP 102, HOSP 122

Corequisite: HOSP 107

Lab fee: \$60.00

HOSP 110 Baking Principles (A) 3 credits

A course in the fundamentals of baking terminology, principles of baking, the characteristics and functions of the main ingredients used in bakery production, and an introduction to the equipment used for baking.

Lecture: 3 hours

HOSP 111 Principles of Baking Operations (SP) 3 credits

A course in the principles involved in operating a bakery department including recipe adjustment, recipe costing, purchasing of baking ingredients, storage procedures, and customer service.

Lecture: 3 hours

Lab Fee: \$5.00

Prerequisites: HOSP 110, 122

HOSP 112 Basic Yeast and Quick Breads (W) 4 credits

A laboratory course in which the fundamentals of producing basic yeast-raised and quick breads are studied. White breads, rolls, variety grain breads, specialty breads, sweet yeast-raised products and quick breads are produced. Emphasis will be given to sanitation, safety, and equipment usage.

Lecture: 1 hour – Lab: 9 hours

Concurrent: HOSP 122

Lab fee: \$60.00

HOSP 113 Pies and Pastries (W) 3 credits

A laboratory course in which the fundamentals of preparing a variety of pies and pastries are studied. A variety of pastry doughs and fillings are produced and finishing techniques are practiced. Emphasis will be given to sanitation, safety, and equipment usage.

Lecture: 1 hour – Lab: 4 hours

Concurrent: HOSP 122

Lab fee: \$60.00

HOSP 114 Advanced Breads (SP) 4 credits

This course builds on the skills learned in HOSP 112 Basic Yeast and Quick Breads. Emphasis will focus on the principles and preparation of complex breads, e.g., artisan bread, Danish dough, puff dough, and pâte à choux using safe and sanitary methods. Industry standard products for commercial production will be introduced.

Lecture: 1 hour – Lab: 9 hours

Prerequisite: HOSP 112

Lab fee: \$60.00

HOSP 115 Cakes, Cookies & Other Desserts (SU) 3 credits

A laboratory course in which the fundamentals of preparing a variety of cakes, cookies and other desserts are studied and produced, utilizing both scratch and convenience techniques. Production of restaurant style desserts, along with specialty or celebration styles, will be emphasized.

Lecture: 1 hour – Lab: 4 hours

Prerequisite: HOSP 122

Lab fee: \$60.00

HOSP 116 Baked Goods and Dessert Presentation and Decoration (SU) 3 credits

A laboratory course in which the styles of decorating and presenting baked goods is studied. Plate, buffet, and retail presentations are demonstrated and practiced.

Lecture: 1 hour – Lab: 4 hours

Prerequisite: HOSP 122

Lab fee: \$50.00

HOSP 122 Hospitality Sanitation and Safety (A, W, SP, SU) 3 credits

A detailed study of the HACCP (Hazard Analysis Critical Control Points) procedures which include the control of bacteria, materials handling and safety practices to maintain a safe and healthy environment for the consumer in the food and lodging industry. Examination of laws and regulations related to safety, fire, and sanitation. Students must pass the applied Foodservice Sanitation examination from the National Restaurant Association Educational Foundation. Students will receive certificates from the National Restaurant Association Educational Foundation and from the Ohio Department of Health.

Lecture: 3 hours

Lab fee: \$15.00

HOSP 123 Food Purchasing (A, SP) 3 credits

Provides a working knowledge of procurement methods and procedures and record keeping (manual methods and computer applications) when purchasing, receiving, and storing food, equipment and nonfood supplies. Special emphasis is given to writing specifications, determining order quantities, evaluating product quality, and selecting suppliers. Field trips allow the student to see food processing operations and wholesale food markets.

Lecture: 3 hours

Prerequisites: HOSP 107 and DEV 031 or MATH 101 or MATH 102

Lab fee: \$5.00

HOSP 143 Hospitality and Travel Law (A, SP, DL) 3 credits

Provides a general knowledge of the law as it applies to the hospitality and tourism industry.

Lecture: 3 hours

Lab fee: \$3.00

HOSP 145 Lodging Operations (W) **5 credits**
This course provides students with a basic understanding of the lodging industry. It covers the activities of various hotel operating departments: front office, housekeeping, food and beverage, hotel purchasing, marketing, yield management, engineering, security, and hotel accounting. Emphasis will be placed on guest satisfaction.
Lecture: 4 hours – Lab: 2 hours
Lab fee: \$25.00

HOSP 153 Nutrition for a Healthy Lifestyle (A, W, SP, SU,–DL) **5 credits**
A study of the role of nutrition in establishing, promoting and maintaining good health. The composition and functions of foods, nutrition needs throughout the life cycle, and contemporary nutrition concerns are included in the course.
Lecture: 5 hours
Prerequisites: DEV 031 and placement into ENGL 101
Lab fee: \$10.00

HOSP 154 Destination Geography (A, W) **5 credits**
Geographical and cultural study of all major regions of the world with emphasis on the most popular travel destinations. Includes lodging, points of interest, customer profile, and transportation types for each destination.
Lecture: 5 hours
Lab fee: \$5.00

HOSP 157 Travel and Tourism Operations (W, SP) **5 credits**
This course provides students with a basic understanding of the travel and tourism industry. Travel agency operations are covered, with students using a variety of reference materials to develop air and rail itineraries, reserve cars and hotels, calculate fares, and create tours and cruises. Government agencies and organizations that affect the industry are described. Also included is a framework for the development of tourism in the community and region.
Lecture: 4 hours – Lab: 2 hours
Prerequisite: HOSP 154
Lab fee: \$35.00

HOSP 203 Beverage Management (W, SU,–DL) **3 credits**
Classification, history and control of beer, wines and spirits. Covers Ohio liquor and legal regulations, inventory control, liquor dispensing systems, cash control, drink merchandising and alcohol responsibility. The art of mixology and wine and food affinity.
Lecture: 3 hours
Lab fee: \$20.00

HOSP 205 Records and Cost Control (A, SP) **4 credits**
Covers the principles and procedures involved in an effective system of food, beverage, labor and sales control. Emphasizes development and use of standards and calculation of actual costs.
Prerequisite: MATH 101 OR MATH 102
Lecture: 4 hours

HOSP 206 Management Accounting for Hospitality (W) **4 credits**
Covers accounting theory and use of the Uniform System of Accounting as applied to the hospitality industry. Emphasizes development and use of financial statements. Provides an overview and understanding of the need for budgets and budgeting.
Prerequisite: ACCT 106
Lecture: 4 hours
Lab Fee: \$2.00

HOSP 214 International Cuisine (W, SU) **3 credits**
This course focuses on the cuisines of the world. Students will research diverse countries and regions and cook from recipes that represent a variety of cultures, native foods, seasonings and flavors.
Lecture: 1 hour – Lab: 4 hours
Prerequisites: ENGL 102, HOSP 216
Lab fee: \$75.00

HOSP 216 Food Laboratory II (A, SP) **3 credits**
A laboratory course to follow HOSP 106–Food Laboratory I for registered Chef Apprentices. Proper roasting, grilling, poaching, sautéing and braising of meats, seafood, and poultry with appropriate sauces. Classical preparation of consommé, bisque, and cream soups. Starch and vegetable preparation. Plated desserts, too. Students will research and develop recipes and prepare and serve four-course menus in the required amount of time.
Lecture: 1 hour – Lab: 4 hours
Prerequisites: HOSP 106 and HOSP 107
Lab fee: \$100.00

HOSP 217 Garde Manger (A, SP) **3 credits**
A laboratory course including preparation and presentation of cold food items commonly produced in a garde manger station. Students will prepare garnishes, appetizers, salads, sandwiches, marinades, relishes, cold sauces and forcemeat items. Course introduces ice carving. Buffet presentation, including platters, bowls and plates, and culinary show guidelines and practices are covered.
Lecture: 1 hour – Lab: 4 hours
Prerequisite: Permission of instructor/chair
Lab fee: \$75.00

HOSP 218 Fundamentals of Baking (W, SU) **3 credits**
Includes the fundamentals of baking and functions of ingredients for production of baked goods and dessert specialties. Proper use and care of equipment, as well as principles of safety and sanitation are emphasized.
Lecture: 1 hour – Lab: 4 hours
Prerequisite: Permission of instructor/chair
Lab fee: \$50.00

HOSP 219 Food Production Management (SP) **4 credits**
A capstone laboratory course in which application of foodservice management will occur in a simulated restaurant. Students will plan menus, prepare food items, and serve the public to gain experience in various managerial positions in the front and back of the house. A grade of “C” or higher is required for graduation.
Lecture: 1 hour – Lab: 8 hours
Prerequisite: Permission of instructor/chair
Lab fee: \$60.00

HOSP 224 Hospitality Supervision and Quality Management (W, SU) **5 credits**
This course applies supervisory skills and quality management principles to the hospitality/tourism industry and includes the study of organization structures, performance standards, employee selection and retention processes, orientation and training programs, employee appraisal and performance improvement, and quality improvement techniques. A grade of “C” or higher is required for graduation.
Lecture: 5 hours
Prerequisite: BMGT 102
Lab fee: \$5.00

HOSP 225 Menu Development (A, SP, SU) **3 credits**
Covers principles of menu planning for a variety of foodservice operations. Includes merchandising techniques, layout and design, and pricing strategies. Consideration is given to food selection; nutritional requirements; food, labor, and other costs; equipment utilization, and computer application.
Lecture: 3 hours
Prerequisites: HOSP 153 and HOSP 107
Lab fee: \$5.00

HOSP 246 Hospitality Sales and Marketing (W, SP) **3 credits**
Covers selling theory, including all phases of the selling process, from initial contact to closing the sale in a variety of hospitality and tourism settings. Includes the basic knowledge and skills necessary to work within

a hospitality or tourism organization's marketing plan.

Lecture: 3 hours

Lab fee: \$5.00

HOSP 257 Global Distribution Systems (W, SP,-DL) 3 credits

This course is designed to combine student reading materials with hands-on computer experience in a simulated travel agency setting. The state-of-the-art CBL Viasinc GDS Training System APOLLO will be used to develop student skills in the utilization of the Global Distribution System. Working in the networked Windows environment, students will learn how to search for travel information, make airline reservations and issue tickets.

Lecture: 1 hour – Lab: 5 hours

Prerequisite: HOSP 157 and CIT 101

Lab fee: \$40.00

HOSP 270 Event Management (A, SP) 3 credits

This course will describe how event managers design, plan, market, and stage an event of any size. The course will describe the managing of staff and how to handle staffing problems. The course will describe the safety requirements to ensure staff and attendees safety. This course will also describe the legal compliance, risk management, financial control, and evaluations of the success of the event. This course will be coordinated with the catering events in HOSP 272 to put into action the planning, marketing, and contracting lessons discussed in HOSP 270.

Lecture: 3 hours

Prerequisites: MATH 101 and ENGL 100

HOSP 271 Meeting Planning & Catering Services (W, SU) 3 credits

Principles of and practice experiences in meeting planning and catered functions. Students will plan, organize, execute, and evaluate meeting and catering functions to meet the needs of clients and guests. Emphasis is placed on how customer satisfaction is measured.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: HOSP 122 and ENGL 101

Lab fee: \$20.00

HOSP 272 Catering Services (A, SP) 2 credits

Principles of and practice experiences in catered functions, on and off-premise. Students plan, organize and execute catering functions to meet the needs of clients and guests.

Lecture: 1 hour – Lab: 2 hours

Prerequisites: HOSP 122 and ENGL 101

Lab fee: \$25.00

HOSP 273 Casino and Gaming Operations (On Demand) 3 credits

Covers the history of the gaming industry from its beginning to the present. Course familiarizes student with gaming trends and emphasizes the operation and management of the gaming and casino industry. Upon completion of this course, the student should see the necessity of the intricate workings of all departments in a casino organization including marketing, accounting and finance, and customer relations.

Lecture: 3 hours

Lab fee: \$5.00

HOSP 286 Apprenticeship Final Project (SU, W) 2 credits

A capstone course required for students registered in the three year American Culinary Federation National Apprenticeship Training Program. Preparation for and completion of national practical and written examinations. Evaluation of 6000 hours on-the-job training and documentation of completion of all required training objectives.

Lecture: 2 hours

Prerequisite: Permission of instructor/chair

Lab fee: \$80.00

HOSP 291 Hospitality Cooperative Work Experience I

(A, W, SP, SU,-DL)

1-3 credits

Work experience in the hospitality/tourism industry. A minimum of 200 hours will be spent in cooperative work experience, with one classroom hour per week in an on-campus seminar. This course is designed for Travel/Tourism/Hotel Management and Foodservice/Restaurant Management majors.

Lecture: 1 hour – Lab: 20 hours

Lab fee: \$10.00

HOSP 292 Hospitality Cooperative Work Experience II

(A, W, SP, SU,-DL)

3 credits

A continuation of HOSP 291. Work experience in the hospitality/tourism industry. A minimum of 200 hours will be spent in cooperative work experience, with one classroom hour per week in an on-campus seminar. This course is designed for Travel/Tourism/Hotel Management and Foodservice/Restaurant Management majors.

Lecture: 1 hour – Lab: 20 hours

Prerequisite: HOSP 291

Lab fee: \$10.00

HOSP 293 Hospitality Cooperative Work Experience I

(A, SP)

3 credits

Work experience in the hospitality/tourism industry. A minimum of 200 hours will be spent in cooperative work experience, with one classroom hour per week in an on-campus seminar.

Lecture: 1 hour – Lab: 20 hours

Prerequisite: Chef Apprentice major

Lab fee: \$80.00

HOSP 294 Hospitality Cooperative Work Experience II

(A, SP)

3 credits

A continuation of HOSP 293. Work experience in the hospitality/tourism industry. A minimum of 200 hours will be spent in cooperative work experience, with one classroom hour per week in an on-campus seminar.

Lecture: 1 hour – Lab: 20 hours

Prerequisites: HOSP 293 and Chef Apprentice major

Lab fee: \$80.00

HOSP 295 Hospitality Cooperative Work Experience III

(A, SP)

3 credits

A continuation of HOSP 293 and HOSP 294 required for third year chef apprentices. On-the-job training in the foodservice industry following guidelines of the American Culinary Federation National Apprenticeship Training Program. One classroom hour per week will be spent in an on-campus seminar.

Lecture: 1 hour – Lab: 20 hours

Prerequisite: Permission of instructor/chair

Lab fee: \$80.00

Human Resources Management Technology (HRM)

HRM 121 Human Resources Management (A, W, SP, SU,-DL)

4 credits

An introductory course in Human Resources Management, including the philosophy, principles, and legal aspects of human resources management and the roles of the manager and the human resources professional/department in this management function. The course focuses on the laws governing policymaking, recruiting, selection, training, evaluation, wage and salary administration, benefit programs, representation, and safety and the employer's obligations and the employee's rights under these laws. Students use the Internet to research human resources issues.

Distance Learning Students: Course content is provided online or rental audio lecture tapes or CDs obtained from the ERC with paid fee receipt. Other course materials are provided in a packet mailed prior to the beginning of the quarter, and graded assignments are returned via mail. The fees for the rental audio tapes and course mailings are included in the distance learning lab fee.

Lecture: 4 hours

Prerequisite: BMGT 111 or LAWE 252 (Law Enforcement students only) or BMGT 218 (Supply Chain Management students only), and ENGL 102

Lab fee: \$10.00

Distance Learning Lab fee: \$40.00

HRM 122 Human Resource Policy and Procedure Writing (W, SU) 4 credits

The course provides an in-depth study of employment law, the recruiting process, and the selection process. It promotes a transition from “term paper writing” to formal policy writing; and the application of employment law, business grammar, and policy writing skills through the development of an employment policy, procedure, and an employee handbook summary of the policy. The course is offered at night Winter Quarters and during the day Summer Quarters.

Lecture: 2 hours – Lab: 5 hours

Prerequisites: HRM 121 with a minimum grade of “C”, OADM 101 with a minimum grade of “C”, CIT 102, and ENGL 102

Lab fee: \$10.00

HRM 124 Personnel Interviewing (A, W, SP, SU) 4 credits

The course provides an in-depth study of the legal aspects of interviewing, the various types of interviews conducted in business, and interviewing techniques. Students participate, as both an interviewer and an interviewee, in selection, counseling, disciplinary, exit, and performance appraisal interview simulations. Interviewing techniques and skills are evaluated using videotape playback.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: HRM 121 (BMGT and HRM Technology students only) and COMM 105 or COMM 110

Lab fee: \$10.00

HRM 220 Labor Relations (A, W, SP, SU,–DL) 5 credits

The course provides a study of labor relations including the history of the labor movement; the legislative history; in-depth study of the four major pieces of private sector collective bargaining legislation; a discussion of the State of Ohio collective bargaining law; the union organizing process and management responses; the collective bargaining process, grievance process, and arbitration process; and the differences in these processes in the public and private sectors. Students participate, as members of labor and management teams, in contract negotiations, third-step grievance meeting, and grievance arbitration simulations. *Distance Learning Students:* Course content is provided online or on rental audio lecture tapes or CDs obtained from the ERC with paid fee receipt. Other course materials are provided in a packet mailed prior to the beginning of the quarter, and graded assignments are returned via mail. The fees for the rental audio tapes and course mailings are included in the distance learning lab fee.

Lecture: 3 hours – Lab 4 hours

Prerequisites: HRM 121 and MATH 101 or MATH 103

Lab fee: \$10.00

Distance Learning Lab fee: \$40.00

HRM 221 Staffing Under the Law (A, SP) 4 credits

The course provides an in-depth study of the laws governing affirmative action, sexual and other forms of harassment, discipline, and termination, and the application of these laws through the development of policies, procedures, rules, regulations, and summary postings for the organization. The course is offered in the afternoon during Autumn Quarters and at night during Spring Quarters.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: HRM 121, HRM 122 with a minimum grade of “C”, CIT

102, and MATH 135

Lab fee: \$10.00

HRM 222 Monetary Compensation (A, SP) 4 credits

The course provides an in-depth study of the history, principles and theories of a compensation package; the laws governing monetary compensation, and the application of these principles, theories and laws through the development of internal and external equity in monetary compensation including the job analysis process, the development of job descriptions and job specifications, and the job evaluation process. The course also addresses the development of monetary compensation policies and procedures. The course is offered in the afternoon during Autumn Quarters and at night during Spring Quarters.

Lecture: 4 hours

Prerequisites: HRM 121, HRM 122 with a minimum grade of “C”, CIT 102, MATH 135

Lab fee: \$10.00

HRM 224 Human Resources Records Management (W, SU,–DL) 3 credits

The course provides an in-depth study of the records governing the employment relationship required by the federal and state laws and the legal aspects of those records, and approaches to developing record keeping systems that meet professional and industry standards. Students are required to demonstrate skills through the development of legally sound records management policies and procedures. The course is offered at night Winter Quarters and during the day Summer Quarters.

Lecture: 3 hours

Prerequisites: HRM 121, HRM 122 with a minimum grade of “C”, and CIT 102

Lab fee: \$10.00

HRM 225 Workplace Safety (W, SU, DL) 3 credits

The course provides the student in the Human Resources Management technology with an overview of alcohol and drug use as they relate to contemporary workplace issues, violence in the workplace and management’s obligations and options, and management’s obligations and options under OSHA and other safety regulations. The course is offered at night Winter Quarters and during the day Summer Quarters.

Lecture: 3 hours

Prerequisites: HRM 121 and HRM 122 with a minimum grade of “C”

Lab fee: \$4.00

HRM 226 Mandatory Benefits (A, SP) 4 credits

This course provides an in-depth study of benefits mandated by federal law, including Social Security, Worker’s Compensation, Unemployment Compensation, Family and Medical Leave (FMLA), the Health Insurance Portability and Accountability Act (HIPAA), and the Consolidated Omnibus Budget Reconciliation Act (COBRA).

Lecture: 4 hours

Prerequisites: HRM 121, HRM 122 with a minimum grade of “C”, MATH 103, ENGL 101, ENGL 102, and ENGL 200

Lab fee: \$10.00

HRM 227 Voluntary Benefits (A, SP) 4 credits

This course provides an in-depth study of voluntary benefits—those benefits employers most commonly choose to offer to help attract and retain employees. The course will focus on health insurance options (medical, dental, vision, prescription drug, catastrophic illness) and the types of providers of these options (HMOs, PPOs, traditional carriers, HSAs), life insurance options (basic life, supplemental life, term life, and accidental death and dismemberment), short-term and long-term disability options, pension/retirement plan options, pay-for-time-not-worked options (holidays, vacations, sick leave, personal leave, bereavement leave, jury duty, military leave, and other PTO options), and miscellaneous benefit options (tuition reimbursement, child/elder care, safety equipment, social and sports programs).

Lecture: 4 hours

Prerequisites: HRM 121, HRM 122 with a minimum grade of “C”, MATH 103, ENGL 101, ENGL 102, and ENGL 200
Lab fee: \$10.00

HRM 240 Administration of Human Resources Management (W, SU) 5 credits

As a part of the capstone sequence for the Human Resources Management Technology, the course provides a hands-on application environment wherein students serve as a “Board of Directors,” developing the full range of human resources policies, procedures, and programs. To demonstrate the depth and breadth of their knowledge, understanding, and skill, students are assigned two to four individual projects, in the major topic areas (employment, compensation, benefits, performance appraisal, discipline, safety, and training), in the form of presentations, the development of policies and/or procedures as appropriate to the presentation, and the development/securing of documents as appropriate to the presentation. As a group, students review, revise, and approve or reject policy, procedure, and program recommendations made by the presenter. The course is offered only at night both Winter and Summer Quarters.

Lecture: 0 hours – Lab: 10 hours

Prerequisites: HRM 121, 122, 124, 220, 221, 222, 224, 225, 226, and 227 all with a minimum grade of “C”, and CIT 137 with a minimum grade of “C”.

Lab fee: \$5.00

HRM 242 Human Resources Management Practicum (A, W, SP, SU) 2 credits

As a part of the capstone sequence for the Human Resources Management Technology, the course provides a guided work experience in a human resources office or work environment providing human resources services. The student and the employer/placement site supervisor determine exact duties. Students are responsible for securing their own practicum position.

Lecture: 0 hours – Lab: 14 hours

Prerequisites: HRM 121, 122, 124, 220, 221, 222, 224, 225, 226, and 227 all with a minimum grade of “C”, CIT 137, and permission of the HRM Technology program coordinator **requested 2 QUARTERS in advance**

Corequisite: HRM 243

Lab fee: \$2.00

HRM 243 Human Resources Management Practicum Seminar (A, W, SP, SU) 2 credits

As a part of the capstone sequence for the Human Resources Management Technology, the course provides for a discussion of the work experience; and demonstration of the ability to transfer program skills to a real world work environment through the completion of written weekly reports and the development of work related projects and assignments.

Lecture: 0 hours – Lab: 4 hours

Prerequisite: HRM 121, 122, 124, 220, 221, 222, 224, 225, 226, and 227 all with a minimum grade of “C”, CIT 137, and permission of the HRM Technology program coordinator **requested 2 QUARTERS in advance**

Corequisite: HRM 242

Lab fee: \$1.00

Humanities (HUM)

Students who enroll in humanities courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling a humanities course.

HUM 111 Civilization I (A, W, SP, SU,–DL) 5 credits

A survey of the culture, ideas, and values of human civilization from their origins in the Ancient World through the 15th Century. Emphasis is on the

intellectual and artistic achievements of the ancient Middle East, Classical Greece and Rome, the Christian and Arab/Islamic Middle Ages, and Renaissance Italy showing how culture reflects and influences economic, social and political development. Students are exposed to the creative process by reading from primary works of literature and philosophy and critically reviewing works of art, music, theater and dance, both in and out of class. Classes meet three hours per week in small groups for lecture and discussion and in combined sections for two hours per week for group cultural experiences.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$8.00

HUM 112 Civilization II (A, W, SP, SU,–DL) 5 credits

A study of the development of the culture, ideas, and values of the early modern world. Emphasis is on the Protestant Reformation, initial contacts between Europe and other cultures, the rise of modern science, the Enlightenment, the American and French Revolutions, the Industrial Revolution, Baroque, Classical, and Romantic styles in art, music and literature and the revolutionary theories of Karl Marx. Students are exposed to the creative process by reading from primary works of literature and philosophy and critically reviewing works of art, music, theater and dance, both in and out of class. Classes meet three hours per week in small groups for lecture and discussion and in combined sections for two hours per week for group cultural experiences.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$8.00

HUM 113 Civilization III (A, W, SP, SU,–DL) 5 credits

A survey of the triumphs and failures of modern culture, ideas, and values from 1850 to the present. Emphasis is on the conflicts and contradictions between the prevailing spirit of Liberalism, Capitalism, Nationalism and Imperialism from the perspective of the European and non-European worlds, the crises of Western capitalism and democracy and the Fascist and Communist responses, and the major issues confronting world civilization at the turn of the 21st Century. Students are exposed to the creative process by reading from primary works of literature and philosophy and critically reviewing works of art, music, theater and dance, both in and out of class. Classes meet three hours per week in small groups for lecture and discussion and in combined sections for two hours per week for group cultural experiences.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$8.00

HUM 151 American Civilization to 1877 (A, W, SP, SU,–DL) 5 credits

A survey of American History from settlement through the Civil War and Reconstruction. The course places major emphasis on the relationship between historical events and the literature, art, music, major ideas and popular culture, which made up the American intellectual tradition. Students are exposed to the creative process by reading from primary works of literature and philosophy and critically reviewing works of art, music, theater and dance, both in and out of class.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$8.00

HUM 152 American Civilization Since 1877 (A, W, SP, SU,–DL) 5 credits

A survey of the development of the United States from a frontier society to an industrial world power in the 20th century. The course places major emphasis on the relationship between historical events and the literature, art, music, major ideas and popular culture, which have made up the American intellectual tradition. Students are exposed to the creative process by reading from primary works of literature and philosophy and critically reviewing works of art, music, theater and dance, both in and

out of class.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$8.00

HUM 222 Classical Mythology (A, W, SP, SU,–DL) 5 credits

An introduction to the world of mythology, the human and the supernatural, the real and the fantastic through a study of myths from Greece and Rome. The course explores some of the religious ideas, traditions and values that distinguish one civilization from another, while also indicating universally shared themes. Attention will be given to cultural expressions of mythical themes in literature and art.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 224 African-American History from Emancipation (On Demand) 5 credits

A survey of African-American History from the Civil War to present. Emphasis will be placed on the struggle for political, social and economic freedom as well as the contributions of African-Americans to the music, art, and literature of the United States. Meets Humanities requirement for A.A.S. students.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 245 Music and Art since 1945 (On Demand) 5 credits

A survey of the styles and subject matter of important contemporary works of music and visual art. Students will examine the wide spectrum of aural and visual expression that has developed since the Second World War such as aleatoric music, electronic music, abstract expressionism, performance art, pop and op art, minimalism, etc. Students will also examine the major intellectual and social issues of the day and the relationship between these issues and the styles and expressive content of contemporary music and art.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 251 Latin American Civilization (On Demand) 5 credits

A general introduction to the history and cultures of Latin America through the study of literature, film and primary historical texts. The course will employ an interdisciplinary approach to explore the relationship between culture and the major historical, political, and socio-economic developments in Latin America from 1492 to the present.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 252 The Islamic World and the Middle East (On Demand) 5 credits

A survey of Islamic civilization from the birth of Mohammad to the destruction of the Ottoman Empire in the 20th century. Emphasis is placed on developing an understanding of the nature and diversity of the Islamic religion, an appreciation of the great cultural achievements of medieval Islam, and an awareness of the complexities of the problems of the contemporary Middle East. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in history, social sciences, and non-Western studies.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 253 History of China and Japan (On Demand) 5 credits

A survey of the economic, social, political, and cultural development of China and Japan from earliest times to present. Meets elective requirements in the Associate of Arts and Associate of Science degree programs

and distributive transfer requirements in history, social sciences, and non-Western studies.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$2.00

HUM 254 Introduction to African Literature (On Demand) 5 credits

A general survey of sub-Saharan African literature including the oral traditions that formed its background. Students will examine traditional African artistic expressions such as dance, drama, poetry and short story as well as novels produced by European-educated writers. Students will read literary texts originally written in English or in English translation.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 270 Comparative Religions (A, W, SP, SU,–DL) 5 credits

Introduction to the study of religion through a historical overview and comparison of the major world religions of Judaism, Christianity, Islam, Buddhism, and Hinduism through readings in their sacred texts in translation. Attention will be focused on the concepts, categories, theories, and methods used by the various religious disciplines and how each of them addresses basic issues of the human condition. Also included will be an examination of Sectarianism and contemporary sects in America and the World. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in comparative studies, religion, and philosophy.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

HUM 290 Capstone Experience in the Humanities (On Demand) 3 credits

A capstone course focusing on synthesis among the disciplines of the Humanities, including but not limited to, history, classics, art history, music history and philosophy. Students will work on developing research techniques and methodologies and will apply these techniques to a project of their own design.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Open only to A.A. and A.S. students preparing to graduate within 2 academic quarters.

Lab fee: \$2.00

HUM 299 Special Topics in Humanities (On Demand) 1 to 5 credits

Special topics from the Humanities discipline designed to meet specific needs.

Lecture: variable hours – Lab: 0 hours

Lab fee: \$2.00

Interactive Media (IMMT)

IMMT 100 Digital Literacy (–DL) 2 credits

This course provides students an interdisciplinary approach to understanding how to evaluate and create digital media. Major areas of emphasis include how digital information/media are created, organized and accessed; how to evaluate the reliability of Web sites and information sources; basics of how to create and manipulate digital media including digital photography, digital video, scanning and the fundamentals of Web site design. In step-by-step tutorials, students will learn how to download text, images, sounds, video, data and software from the Internet. NOTE: This course is an introduction to these topics; subsequent course offerings are available for those who want to learn more.

Lecture: 1 hour – Lab: 2 hours

Prerequisites: None

Lab Fee: \$20.00

IMMT 101 Principles of Interactive Media (A, W, SP, SU,–DL)**3 credits**

This is the first of the two course series introducing students to the products, tools, and environment of the interactive multimedia profession. This first course covers elements of communication, marketing, the Internet, Web development, digital media and graphic design. This course relies on industry Web sites to bring state-of-the-art information directly to the student in a timely manner.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: None

Lab fee: \$20

IMMT 111 Foundations of Media (A, W, SP, SU) 4 credits

The second of a two-course series that expands on the required disciplines needed to function in the interactive multimedia industry. The primary focus in this course centers on designing, choosing software and scripting the interactive media project. This course details how these disciplines are related to professional job responsibilities and the other team members.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 101

Lab fee: \$10

IMMT 121 Introduction to Multimedia (A,–DL) 2 credits

This is the first of a two-course series introducing students to the products, tools and environment of interactive multimedia. This first course covers elements of communication, marketing, digital media, the Internet, Web development and the interactive design process. This course is not intended for Interactive Media majors.

Lecture: 1 hour – Lab: 3 hours

Prerequisite: None

Lab Fee: \$30.00

IMMT 122 Digital Media Preparation (W,–DL) 3 credits

This is the second of the two-course series on the required disciplines needed to function in the interactive multimedia profession. Primary focus in this course centers on planning, design and the software required in the completion of a multimedia project. This course is not intended for Interactive Media majors.

Lecture: 3 hour – Lab: 0 hours

Lab Fee: \$33.00

IMMT 150 Basic Cinematography & Editing (A, SP) 4 credits

This course deals with the use of audio and video production techniques to prepare output for various multimedia formats (e.g. DVDs, PDAs, interactive CDs, etc.) so as to achieve integrated marketing communications goals. Students are introduced to basic theories and practices of audio and video production. The audio component includes the use of microphones, mini disc recorders, mixing consoles, and digital audio workstations for a variety of sound collection and processing applications. The video component introduces basic concepts and skills in digital video productions and nonlinear video editing. Students will learn the theory and practice of digital nonlinear editing, including edit list management, off-line and online editing techniques.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: IMMT 101, IMMT 111

Lab Fee: \$36.00

IMMT 151 Audio Editing & Voice Over (W) 4 credits

This course is designed to develop an understanding of the relationship of audio production to various related media including multimedia and broadcast. Sound design and the creation and recording of audio assets are stressed. The course is structured around editing in a nonlinear environment and the associated standard digital editing practices. Students will learn how to utilize a digital audio workstation in a typical production environment.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 150

Lab Fee: \$36.00

IMMT 152 Narrative Storytelling & Production (W) 4 credits

This course provides students with an overview of genre storytelling. Students will analyze specific genres, write an appropriate script for the genre, storyboard, and produce a genre-focused video. In addition to genre storytelling, students will learn the proper video and audio aesthetics for telling a specific story (dialogue framing, planning action scenes, using boom mics, scoring a video). Image capture/digitizing and editing at a digital workstation will be highlighted.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: IMMT 150, IMMT 153, GRPH113

Lab Fee: \$36.00

IMMT 153 Formatting & Screenwriting for Digital Video and Audio (A, SP) 3 credits

This course deals with writing principles and theories used in the digital audio and video fields. In addition to basic writing principles, students will learn to develop a treatment, plan characters, write effective scenes, and a screenplay for use in both audio and video.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ENGL 101, ENGL 102, IMMT 101

Lab Fee: \$22.00

IMMT 155 Foley Art & Sound Design (SP) 4 credits

This course will cover both the production and post-production techniques associated with the creation of audio assets for use in digital media. Students will be required to plan and produce multimedia programs with audio assets that the individual student creates. The course provides an advanced understanding of audio equipment for digital production in the field and in the recording studio. The use of ProTools technology is emphasized.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 151

Lab Fee: \$20.00

IMMT 158 Motion Graphics (After Effects) (SP) 3 credits

In this course students will learn fundamentals of how to use After Effects to create motion graphics by integrating interactive media, sound, and video into interesting compositions. Students will learn how to set keyframes on a timeline and work with transform properties, motion paths, masks, and effects.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: IMMT 111, 150, 152, 240

Lab Fee: \$20.00

IMMT 213 Designing an E-Commerce Website (A, SP) 4 credits

E-Commerce, a frequently used word in the area of business. This course covers not just the why, but also the practical application of creating a shopping cart. Looking at multiple service providers and how they relate to a cart. Setting up, creating and implementing a working shopping cart will be the final goal of the course.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 101, IMMT 111, IMMT 214

Lab fee: \$30.00

IMMT 214 Web Database Development (W) 4 credits

This course introduces students to the concepts of a relational database. Students learn how to open, access and add records to an e-commerce Web site. Querying databases is a focus of the course. Students are required to complete a Web site that includes a functional database within it.

Lecture: 2 hours–Lab: 4 hours

Prerequisites: IMMT 101, IMMT 111

Lab fee: \$30.00

IMMT 216 Dynamic Graphics (A, W, SP, SU) 4 credits

Image input, storage and retrieval using the industry standard Adobe Photoshop/Image Ready are the focus of this course. Each electronic photograph must be handled from digitization, through augmentation and final storage or utilization phases. Files will be transported over the Internet utilizing

industry-standard file compression and transmission technologies.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: IMMT 101, IMMT 111, GRPH 112, GRPH 251

Lab fee: \$30.00

IMMT 217 Video Editing (W, SU) 4 credits

The basic principles of digital video are presented. Course covers the standards and methods for recording/editing and the interconnection of digital video. Concepts of digital conversation, video coding and processing, and digital audio with video are presented.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 101, IMMT 111

Lab fee: \$33.00

IMMT 236 Designing in 3rd Dimension (W, SP) 4 credits

This course provides students with an overview of how to model, render, light, and animate in 3D environments using industry standard software. Topics covered include environment navigation, primitive geometry construction, basic lofting, modifier based editing, parametric editing, texture creation, basic texture mapping, basic lighting, particle systems, and basic keyframe animation. Web design and 2D editing tools are also integrated in the course material. Maya software is used in this class.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: IMMT 101, IMMT 111

Lab fee: \$36.00

IMMT 237 Beginning Flash [Design] (A, SP) 4 credits

This course provides the students with an overview of how to begin, storyboard, create and design a fully functional Flash Web site. This course surveys the major sources of businesses that use Flash. Topics covered include becoming familiar with the palettes and tool box, new design, and drawing techniques, using Flash as an authoring tool, and understanding and applying Flash's expanded actions and scripting capabilities.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: IMMT 216, GRPH 243

Lab fee: \$33.00

IMMT 238 Intermediate Flash [User Interaction with ActionScript] (W) 4 credits

Scripting is an accessible and powerful form of computer programming that designers and multimedia developers can use to increase the level of interactivity, optimize, and enhance their multimedia web projects. The purpose of the course is to teach the core concepts of scripting as they apply to multimedia and Web development.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 237

IMMT 239 Advanced Flash [Interactive Development-Gaming] (A) 4 credits

This course covers the gaming industry, careers, and the basic terminology. Topics include history of gaming; an industry overview; career paths, the state of the job market, and the skills needed for various jobs, genres and platforms; societal issues; the study of games and "play"; the future of gaming; development of design, teamwork, business, and production skills—all using the Flash application.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 238

Lab fee: \$33.00

IMMT 240 Documentary Storytelling & Production (SP) 4 credits

This course provides students with an overview of documentary storytelling. Students will analyze documentaries, write appropriate scripts for the documentary, storyboard, and produce a documentary video that has relevance to the local area. Students will also learn the proper video and audio aesthetics for telling the documentary (interviewing, developing a narrative from footage, framing shots, documentary assets, etc.). Image capture/digitizing and editing at a digital workstation will be highlighted.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: IMMT 150, IMMT 152, IMMT 153

Lab Fee: \$36.00

IMMT 249 Corporate and Instructional Video Production (SU) 4 credits

This course is designed to expand student understanding of video production in a corporate environment. Students will learn how to tell appropriate corporate and instructional stories. Techniques and aesthetics for corporate videos will be a main focus (framing, steadicam movement, costumes, casting, etc.). Advanced skills in image capture/digitizing, titles, and editing at a digital workstation will be developed through the creation of comprehensive video projects for internal and nonprofit organizations.

Lecture: 4 hours

Prerequisite: IMMT 240

Lab Fee: \$36.00

IMMT 250 Document Transfer Using Acrobat (A, SP,–DL) 3 credits

Adobe Acrobat facilitates the creation of PDF documents, the industry-standard format for cross platform document delivery. This course will present an overview of Adobe Acrobat, its use and application in production, with emphasis on generating Acrobat PDF files for integration and delivery in a pre-press environment and on the Web. Students must have access to Adobe Acrobat 6.0 software (not just the reader).

Lecture: 2 hours – Lab: 0 hours

Lab Fee: \$ 22.00

IMMT 251 Multimedia Practicum (A, W, SP, SU,–DL) 4 credits

Supervised on-the-job application of knowledge and skills acquired in the classroom. Internship applications must be filed with the Department at least 2 months prior to internship start date.

Lecture: 0 hours – Lab: 28 hours

Prerequisites: IMMT 101, IMMT 111, IMMT 216, and permission of instructor; contact the Interactive Media area for details

Corequisite: IMMT 252

Lab fee: \$3.00

IMMT 252 Seminar on Multimedia Production (A, W, SP, SU,–DL) 2 credits

Application of business knowledge to specific areas of on-the-job practicum experience. Internship applications must be filed with the Department at least 2 months prior to internship start date.

Lecture: 0 hours – Lab: 4 hours

Prerequisites: IMMT 101, IMMT 111, IMMT 216. Permission of Instructor; contact the Interactive Media area for details.

Corequisite: IMMT 251

Lab fee: \$3.00

IMMT 260 DVD Development (SU) 4 credits

Students will develop a DVD demo reel with the use of Avid software. Topics will include DVD workflow, preparing video assets, compressing video for DVD, DVD menus, and promotion using DVD covers. At the end of the course, students will be able to develop their own DVD demo reel for external use in locating a professional position.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: IMMT 151, IMMT 155, IMMT 249

Lab Fee: \$36.00

IMMT 262 Building Hierarchical Web Sites (W, SP, SU) 4 credits

This course provides the student with an overview of how to begin, storyboard, create and design a fully functional Web site. The software Dreamweaver is a professional authoring tool for creating and managing Web pages. Topics covered include becoming familiar with the palettes and tool box, design techniques, using Dreamweaver as an authoring tool, understanding and applying Dreamweaver's expanded scripting capabilities.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: IMMT 101, IMMT 111, IMMT 216, IMMT 236, IMMT

Lab fee: \$30.00

IMMT 271 Interactive Portfolio Development (A, SP) 4 credits

30 weeks of Flash design and development will assist students in building confidence and focus when marketing themselves. Students will take that knowledge and author their own interactive CD resume for external use in locating a professional job.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: IMMT 239

Lab fee: \$33.00

IMMT 280 Adobe Flash–Basic Level 4 credits

Flash is used to create beautiful, resizable, and extremely small and compact navigation interfaces, technical illustrations, long-form animations, and other effects for Web sites and other Web-enabled devices (such as Web TV). Flash graphics and animations are created using the drawing tools in Flash or by importing artwork from vector illustration tools, such as Illustrator. In this hybrid (one 8-hour day plus Web component) curriculum, students will learn how to create artwork with Flash, how to animate artwork, and how to make interactive movies. This course cannot be substituted for required technical courses in the Interactive Media degree but may be used to fulfill a technical elective.

Lecture: 4 hour – Lab :0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$33.00

IMMT 281 Adobe Flash–Intermediate Level 4 credits

This course is designed for the Flash developer who has already achieved an intermediate level of proficiency in Flash (recommended). The hybrid (one 8-hour day plus Web component) curriculum contains 9 Units to help developers master the powerful programming elements of Flash. This course cannot be substituted for required technical courses in the Interactive Media degree but may be used to fulfill a technical elective. It is strongly suggested that students be familiar with Basic Flash before taking this course.

Lecture: 4 hour - Lab: 0 hours

Prerequisite: Permission of Instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$33.00

IMMT 282 Adobe Fireworks 4 credits

A concentrated introduction to Macromedia Fireworks software as used in the Internet Web industry. This WEBTECH course involves two days of comprehensive, live lecture and laboratory applications followed by one day of Web-based training assignments. This course is subject to change with the dynamically changing multimedia industry. Students should check the CSCC WEBTECH Web site for changes, adaptations, text and required materials. See <http://www.csc.c.edu/webtech> prior to starting the class. Students requiring signatures for participation may obtain them from the Interactive Media Department at Eibling Hall Room 401 on the CSCC main campus, or by calling 614-287-5010 or e-mailing webtech@csc.c.edu.

Lecture: 4 hour - Lab: 0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$33.00

IMMT 283 Adobe Dreamweaver 4 credits

This course introduces students to Dreamweaver by guiding them step by step through the development of sample Web projects. In this hybrid (one 8-hour day plus Web component) curriculum, students will learn to create basic HTML pages by formatting text, inserting images, and setting links, and learn to use high-end features such as Dynamic HTML, Cascading Style Sheets, XML, etc. This course cannot be substituted for required technical courses in the Interactive Media degree but may be used to fulfill a technical elective.

Lecture: 4 hour - Lab: 0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$30.00

IMMT 286 Adobe Illustrator 4 credits

Illustrator is an extremely powerful graphics program capable of creating complex illustrations and text effects. In this hybrid (one 8-hour day plus Web component) curriculum, students are exposed to the basic skills that will allow them to take advantage of Illustrator's powerful tools, learn how to navigate in Illustrator, and explore the use of drawing tools and text. This course cannot be substituted for required technical courses in the Interactive Multimedia degree but may be used to fulfill a technical elective.

Lecture: 4 hour – Lab: 0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$33.00

IMMT 290 Adobe PhotoShop and ImageReady 4 credits

In this hybrid (one 8-hour day plus Web component) curriculum, students will learn how to use several Photoshop tools for selecting parts of images, move, duplicate, and resize images. The course also covers how to use and apply layer effects and filters to create special effects, including lighting and texture effects. The use of painting tools and blending modes to create shading effects is covered as well as how to use color reduction algorithms to select colors from the Web palette.

Lecture: 4 hour – Lab: 0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$30.00

IMMT 292 Acrobat Acrobat Pro 4 credits

This course familiarizes students with the basics of After Effects. Students will explore the After Effects environment and become familiar with the tools available. In this hybrid (one 8-hour day plus Web component) curriculum, students will create basic shapes, draw paths with the pen tool, and work with text. Students will also work with colors and gradients and experiment with object layers. Finally, students will create a basic animation and experiment with motion paths, color changes, and rollovers.

Lecture: 4 hour – Lab: 0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$30.00

IMMT 294 Adobe ColdFusion 4 credits

In this hybrid (one 8-hour day plus Web component) curriculum, students are introduced to concepts related to the development of Web pages using ColdFusion. Designed for future expert Web developers, this course covers the following topics: application frameworks, databases, directories and files, e-mail, flow-control, functions, interacting with remote servers, output and formatting, re-using code, and variables. It is strongly suggested that students be familiar with Dreamweaver before taking this course.

Lecture: 4 hour – Lab: 0 hours

Prerequisite: Permission of instructor; contact the Interactive Media area for details: webtech@csc.c.edu; (614) 287-5010.

Lab fee: \$33.00

IMMT 297 Special Topics in Interactive Media (On Demand) 1-6 credits

Detailed examination of selected topics in Interactive Media.

Lab fee: \$3.00

Interpreting /ASL Education (ITT)

ITT 110 Introduction to Interpreting/Transliterating (A) 3 credits

This course is designed to provide students with an overview of the field of interpreting. Topics of study include a historical overview, terminology, interpreter's role, ethics, and career options.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Acceptance into the ITT program after attending one Mandatory Information Session with the program coordinator and completing application

Corequisite: ITT 143

Lab fee: \$5.00

ITT 111 Introduction to the Deaf Community (A, SP) 5 credits

This course is designed to provide students with an overview of the Deaf Community, focusing on social, cultural and education experiences. This course also examines employment, local services available to the Deaf Community, and majority culture's myths and misconceptions of the Deaf Community. This class is an Entrance Requirement for admission into the Interpreting Associate Degree program.

Lecture: 5 hours – Lab: 0 hours

Lab fee: \$5.00

ITT 120 Lexical Analysis and Development for Interpreters (SU) 3 credits

This course focuses on analyzing English and ASL lexical items as they pertain to creating meaning. Topics of study will include vocabulary expansion, English grammar, and thinking beyond ASL gloss. Various aspects of language, such as idioms, slang, and euphemisms will also be developed.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ITT 145, ITT 212, and ITT 201 with a grade of "C" or better

Corequisites: ITT 149 and ITT 202

Lab fee: \$10.00

ITT 121 Legal and Ethical Aspects of Interpreting/ Transliterating (SP) 3 credits

This course looks at applying the RID Code of Ethics to the interpreting situation. Analysis of professional ethics, confidentiality vs. privilege, legal liability, and the role of the interpreter are all covered.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: ITT 204, ITT 220 and ITT 212 with a grade of "C" or better

Corequisite: ITT 123

Lab fee: \$5.00

ITT 123 Specialized Interpreting/Transliterating (SP) 4 credits

This course introduces the student to special vocabulary, skills, and knowledge needed to interpret in special situations. It looks at ethical considerations of these settings as well. Some of these situations include artistic interpreting, interpreting for deaf/blind persons, interpreting in medical settings, and oral interpreting.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: ITT 204, ITT 220 and ITT 212 with a grade of "C" or better

Corequisite: ITT 121

Lab fee: \$5.00

ITT 129 Current Research & Theory of Interpreting (W) 3 credits

As interpreting students begin to learn the skill of interpreting, their knowledge of current interpreting theory is critical. The most relevant and up-to-date research will be examined and discussed as it applies to the profession. Topics will include models of interpreting, processing, prosody, and discourse analysis.

Prerequisites: ITT 110 with a grade of "C" or better

Corequisites: ITT 211, ITT 144

Lab Fee: \$10

ITT 130 Fingerspelling (W, SU) 2 credits

This course offers students the opportunity to work on expressive and receptive fingerspelling. The emphasis of this course is on using fingerspelling in context. Opportunities are provided for the students to work with videotaped materials as well as live models.

Lecture: 1 hour – Lab: 2 hours

Prerequisite: ITT 141

Corequisite: ITT 142

Lab fee: \$5.00

ITT 141 American Sign Language I (A, SP) 5 credits

This course begins with a series of visual readiness activities as a way of introducing the students to and preparing them for a language in a visual modality. The course utilizes a practical approach to teaching vocabulary, grammar, and the cultural aspects through "real life" conversational experiences. The student is further acclimated to the new modality of this language via classroom experiences conducted without voice. Additional information about the Deaf Community is introduced via outside readings, class discussion and required cultural experiences outside of class time. This class is an Entrance Requirement for admission into the Interpreting Associate Degree program.

Lecture: 4 hours – Lab: 2 hours

Lab fee: \$10.00

ITT 142 American Sign Language II (W, SU) 5 credits

ASL II, as a continuation of ITT 141, further acclimates the students to the visual/gestural modality of this language. The course utilizes a practical approach to teaching vocabulary, grammar, and cultural aspects through "real life" conversational experiences. More attention is given to the student's production of the language than in ITT 141, while receptive/comprehension skills continue to be emphasized. Additional information about the Deaf Community is introduced via outside readings, class discussions and participation in cultural experiences. This class is an Entrance Requirement for admission into the Interpreting Associate Degree program.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: ITT 141 with a grade of "C" or better

Lab fee: \$10.00

ITT 143 American Sign Language III (A, SP) 5 credits

ASL III provides the students with additional opportunities to expand their ability to produce and comprehend the language as used in everyday conversational settings. Students continue to recognize the fact that communication is governed by culturally bound rules as they continue to study the culture of the Deaf Community.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: ITT 142 with a grade of "C" or better

Lab fee: \$10.00

ITT 144 American Sign Language IV (W, SU) 5 credits

In ASL IV, students' production and comprehension skills continue to develop qualitatively and quantitatively as they are exposed to a greater variety of interaction activities. Whereas these activities are based on cultural values of the Deaf Community, the students' knowledge of this unique community is expanded.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: ITT 143 with a grade of "C" or better

Lab fee: \$10.00

ITT 145 American Sign Language V (A, SP) 5 credits

As the final course in this five-course series, ITT 145 provides students with opportunities to expand their production and comprehension skills with American Sign Language. Communication activities focus on advanced functions of language usage. Study of the cultural aspects of the Deaf Community is continued.

Lecture 4 hours – Lab: 2 hours

Prerequisite: ITT 144 with a grade of "C" or better

Lab fee: \$10.00

ITT 149 Advanced ASL for Interpreters (SU) 2 credits
Students will expand their use of ASL as it is used specifically in interpreting settings. In-depth skill building of classifiers, use of space, prosody, establishing topics and the distributional and temporal aspects of verbs will be the focus of this course. This course is only open to interpreting majors.
Lecture: 1 hour – Lab: 2 hours
Prerequisites: ITT 145, ITT 201, ITT 212 with a grade of “C” or better
Corequisites: ITT 120 and ITT 202
Lab Fee: \$10

ITT 150 Linguistics of American Sign Language (A, SP) 3 credits
This course offers an introduction to general linguistics, and provides an in-depth analysis of the major grammatical features of American Sign Language. Comparisons are made between English and American Sign Language, noting how grammatical functions are performed differently in the two languages
Lecture: 2 hours – Lab: 2 hours
Corequisite: ITT 143
Lab fee: \$5.00

ITT 170 Conversational ASL (On Demand) 2 credits
This course continues to expand the ASL skills of students beyond ASL V. Students will focus on topics such as narratives, turn-taking, classifiers, and use of space as they apply to ASL conversations.
Lecture: 2 hours – Lab 0 hours
Prerequisite: ITT 145 or permission of instructor
Lab fee: \$5.00

ITT 171 Gesturing and Visual Readiness (On Demand) 1 credit
This course examines the role that gesturing plays in ASL. Students will develop their visual readiness and ability to think in pictures, instead of words. The focus is on using the body and face to give meaning.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

ITT 172 History of the Deaf Community (On Demand) 2 credits
This course provides an in-depth look at the history of the Deaf Community and how it has impacted the linguistic and cultural development of that community. Students will see how deaf history around the world influences ASL, literature, and education of the deaf.
Lecture: 2 hours – Lab: 0 hours
Prerequisite: ITT 143 or permission of instructor
Lab fee: \$5.00

ITT 173 Script Analysis and Translation (On Demand) 2 credits
Using a play script, students will learn the process required to translate the script from written English to signed ASL. Analyzing the script for meaning, examining sign choices, considering character development, and incorporating artistic presence will be developed. For the final project, students perform the translation that they have completed.
Lecture: 1 hour – Lab 1 hour
Prerequisite: ITT 143 or permission of instructor
Lab fee: \$10.00

ITT 174 Religious Interpreting (On Demand) 3 credits
This course examines the challenges that are unique to religious interpreting settings. Students will learn about the basic beliefs, terminology, sacred texts, and worship behaviors for a variety of denominations. Specialized vocabulary for these denominations is emphasized.
Lecture: 2 hours – Lab 1 hour
Prerequisite: ITT 144 or permission of instructor
Lab fee: \$10.00

ITT 175 Text Preparation and Analysis (On Demand) 3 credits
This course gives interpreting majors the opportunity to further develop their ability to prepare and analyze text for interpreting. Topics include comprehension of the source material, multiple meaning, discrimina-

tion, and inference as they pertain to determining appropriate message transfer.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: ITT 202 or permission of instructor
Lab fee: \$10.00

ITT 201 Interpreting I (SP) 3 credits
This course is a theoretical and practical “hands-on” approach to the process of sign language interpreting. The student will be actively learning how to render a signed message in ASL into spoken English, as well as how to render a spoken English message into ASL.
Lecture: 2 hours – Lab: 2 hours
Prerequisites: ITT 129 & ITT 211 with a grade of “C” or better
Corequisites: ITT 145, ITT 212
Lab fee: \$10.00

ITT 202 Interpreting II (SU) 3 credits
This course is a continuation of ITT 201. As such, the students continue the process of actively learning how to render a signed message in ASL into spoken English, as well as how to render a spoken message into ASL. This course places more emphasis on the practical “hands-on” dialogue setting and increasing the speed, accuracy, and complexity of the interpreting process.
Lecture: 1 hour – Lab: 5 hours
Prerequisites: ITT 201, 212 and 145 with a grade of “C” or better
Corequisites: ITT 120 & ITT 149
Lab fee: \$10.00

ITT 203 Interpreting III (A) 3 credits
This course continues to increase students’ knowledge and skills in ASL/English interpretation process. Increased focus is placed on “real life” situational experiences involving complex interpreting settings.
Lecture: 1 hour – Lab: 5 hours
Prerequisites: ITT 202, 149 and 120 with a grade of “C” or better
Corequisite: ITT 220
Lab fee: \$10.00

ITT 204 Interpreting IV (W) 3 credits
As the final course in the four course interpreting sequence, this course continues to increase students’ knowledge and skills in ASL/English interpretation process. Increased focus is placed on “real life” situational experiences involving complex interpreting settings.
Lecture: 1 hour – Lab: 5 hours
Prerequisites: ITT 203 and ITT 220 with a grade of “C” or better
Lab fee: \$10.00

ITT 211 Transliterating I (W) 3 credits
This course is a theoretical and practical “hands-on” approach to the process of sign language transliterating. Students will be actively learning how to render contact varieties and signed English messages into spoken English, as well as how to render a spoken message in English into contact varieties and signed English.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: ITT 110 with a grade of “C” or better
Corequisites: ITT 144 and ITT 129
Lab fee: \$10.00

ITT 212 Transliterating II (SP) 3 credits
This course is a continuation of ITT 211. As such, the students continue the process of actively learning how to render a signed message in a contact variety and signed English into spoken English, as well as how to render a spoken message into a contact variety and signed English. This course places more emphasis on practical “hands-on” dialogue settings and increasing the speed, accuracy, and complexity of the transliteration.
Lecture: 1 hour – Lab: 5 hours
Prerequisites: ITT 129 & ITT 211 with a grade of “C” or better
Corequisites: ITT 145 and ITT 201
Lab fee: \$10.00

ITT 220 Sign to Voice Interpreting/Transliterating (A) 4 credits

This course provides students with additional experience with the process of sign to voice interpreting and transliterating. Students will practice with a variety of deaf and hard of hearing individuals to enhance team and solo voicing skills.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: ITT 120, 212, 149, and 202 with a grade of “C” or better
Corequisite: ITT 203

Lab fee: \$10.00

ITT 265 Special Topics in Interpreting, ASL, Deaf Studies (On Demand) 1–5 credits

This course is offered for interpreters who are employed, or are pre-practice interpreters, who have an issue or skill they would like to explore or further develop. Topics may include any issue or skill that is germane to the field of interpreting, ASL, and/or deaf studies, and appropriate for a diverse student population. This course is repeatable up to 10 hours of credit.

ITT 290 Interpreting/Transliterating Practicum Seminar II (A, W, SP, SU) 1 credit

This course supplements the practicum experience by providing opportunities for sharing experiences via recordings in journals and group discussions.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: Complete all first through fifth quarter courses as per the ITT Plan of Study and ITT 220 and ITT 203 with a grade of “C” or better
Corequisites: ITT 204 and ITT 293

ITT 291 Interpreting/Transliterating Practicum Seminar III (A, W, SP, SU) 1 credit

This course continues to supplement the practicum experience. Applying theory to the daily work setting, applying for jobs, and additional educational opportunities are also discussed.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: ITT 290 and ITT 293 with a grade of “C” or better and completion of all sixth quarter courses
Corequisites: ITT 121, ITT 123 and ITT 294

ITT 292 Interpreting/Transliterating Practicum I (A, W, SP, SU) 2 credits

Students are provided opportunities to observe interpreting situations. These observations are then discussed and applied to the concepts learned in the classroom and applied to the actual setting. Students are required to observe interpreters in a variety of settings. Students also prepare a video portfolio and resume in preparation for Interpreting Practicum II.

Lecture: 1 hours – Lab: 10 hours

Prerequisites: ITT 202, ITT 149, and ITT 120 with a “C” or better and completion of all 1st through 4th quarter courses per the full time plan of study, and 2.0 GPA Tech. Average
Corequisites: ITT 220 and ITT 203
Lab fee: \$30.00

ITT 293 Interpreting/Transliterating Practicum II (A, W, SP, SU) 3 credits

Students are provided opportunities to work in different interpreting situations and apply the concepts learned in the classroom to the actual setting. Students are assigned to work in a variety of settings on a part-time basis and are supervised by staff interpreters.

Lecture: 0 hours – Lab: 20 hours

Prerequisites: ITT 292, ITT 203, and ITT 220 with a grade of “C” or better, completion of all 1st through 5th quarter courses per the full time plan of study, and 2.0 GPA Tech. Average
Corequisites: ITT 290 and ITT 204
Lab fee: \$30.00

ITT 294 Interpreting/Transliterating Practicum III (A, W, SP, SU) 3 credits

Students are provided opportunities to work in different interpreting situa-

tions and apply the concepts learned in the classroom to the actual setting. Students are assigned to work in a variety of settings on a part-time basis and are supervised by staff interpreters.

Lecture: 0 hours – Lab: 15 hours

Prerequisites: ITT 293 and ITT 204 with a grade of “C” or better, completion of all 1st through 6th quarters per the full time Plan of Study, and 2.0 GPA Tech. Average

Corequisites: ITT 291, ITT 121 and ITT 123

Lab fee: \$30.00

Italian (ITAL)**ITAL 101 Elementary Italian I (A, W, SP) 5 credits**

Italian language instruction through the use of texts, audio/visual, and other selected materials to actively and proficiently communicate in the targeted language. This course also operates on developing student’s historical, and cultural consciousness through the use of film, art, music and a wide range of cultural activities particular to the Italian culture. Encourages analytical thinking, individual and group participation and strengthens writing, reading and comprehension skills.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

ITAL 102 Elementary Italian II (W, SP, SU) 5 credits

Continuation of ITAL 101, with further development of listening, reading, speaking, and writing skills and further study of Italian culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ITAL 101 with a grade of “C” or better

Lab fee: \$6.00

ITAL 103 Intermediate Italian I (SP) 5 credits

Continued study of the Italian language and development of listening, reading, speaking and writing skills. Readings from contemporary Italian culture and literature. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ITAL 102 with a grade of “C” or better

Lab fee: \$6.00

ITAL 104 Intermediate Italian II (SU) 5 credits

Reading and discussion of Italian short stories, novels, plays, newspapers, and magazines, emphasizing literary appreciation and the development of Italian culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature programs.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: ITAL 103 with a grade of “C” or better

Lab fee: \$6.00

ITAL 299 Special Topics in Italian (On Demand) 1-5 credits

Detailed examination of selected topics in Italian.

Prerequisite: Varies

Lab fee: \$2.00

Japanese (JAPN)

JAPN 101 Elementary Japanese I (A, W, SU) 5 credits

Course introduces elements of standard modern colloquial Japanese grammar, with emphasis on oral communications and culture. Students will learn to hear and reproduce the sounds of modern Japanese accurately; handle basic interactive skills such as greetings, invitations and apologies; and learn about cultural factors that are reflected in the language.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

JAPN 102 Elementary Japanese II (W, SP) 5 credits

Continuation of JAPN 101 with further development of reading and writing skills and further study of culture. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: “C” or higher in JAPN 101

Lab fee: \$6.00

JAPN 103 Elementary Japanese III (SP) 5 credits

Continuation of JAPN 102 with further development of reading and writing skills and further study of culture. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.

Prerequisite: “C” or higher in JAPN 102

Lecture: 5 hours – Lab: 0 hours

Lab fee: \$6.00

JAPN 104 Elementary Japanese IV (SU) 5 credits

Continuation of JAPN 103 with further development of reading and writing skills and further study of culture. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: “C” or higher in JAPN 103

Lab fee: \$6.00

JAPN 299 Special Topics in Japanese (On Demand) 1-5 credits

Detailed examination of selected topics in Japanese

Prerequisite: vary

Lecture: 5 hours – Lab: 0 hours

Lab fee: \$2.00

Landscape Design/Build (LAND)

LAND 100 The American Landscape (On Demand) 2 credits

This course is an overview of the American Landscape movement with historical, environmental, design, horticultural and professional applications.

Lecture: 2 hours

Lab fee: \$10.00

LAND 101 Landscape Principles (A, W, SP, SU) 3 credits

Landscape principles will study the basic components of landscape design and those elements, that when combined together create such designs.

Lecture: 2 hours – Lab: 3 hours

LAND 102 Residential Landscape Design (A, W) 4 credits

This course will study the application of landscape design principles to construction situations, design vs. style, performing site inventory and analysis, and drafting basic projects.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: ARCH 110, ARCH 112 and LAND 101

Lab fee: \$20.00

LAND 104 Specialty Gardens (W) 3 credits

This course will study the history, development and basic design of gardens including Estate, Victorian, Colonial, Patio, Water, etc. The class will combine both in-class and field experience.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$ 15.00

LAND 105 Spring Landscape Plants (SP, SU) 4 credits

This course will study the identification parameters, landscape features and growing conditions of trees and shrubs of the midwest climate zone. This class will combine both in-class and field experience.

Lecture: 3 hours – Lab: 3 hours

Lab fee: \$10.00

LAND 107 Landscape Maintenance (W, SP) 3 credits

Basic landscape maintenance principles will be discussed with an emphasis on procedures best suited to promote optimum growth and aesthetic qualities of landscape plants. Other areas include soil structure, amendments, pruning and fertilization.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$10.00

LAND 108 Herbaceous Plants (SP, SU) 3 credits

This course will study the identification parameters, landscape features and growing conditions of herbaceous flowering plants such as annuals, perennials, bulbs and herbs. Design of perennial gardens will also be covered.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$15.00

LAND 109 Landscape Arboriculture (A, W) 3 credits

This course introduces the basic principles of tree biology and care. Arboricultural practices will be discussed and performed

Lecture: 2 hours – Lab: 2 hours

Prerequisite: LAND 205

Lab fee: \$15.00

LAND 110 Landscape Computer Applications (On Demand) 3 credits

This course will explore current computer applications as they relate to the landscape industry

Lecture: 2 hours – Lab: 3 hours

Prerequisites: LAND 102, ARCH 112 and CIT 101

Lab fee: \$10.00

LAND 111 Survey of the Landscape Industry (A,W) 2 credits

This course introduces the student to career possibilities in the green industry.

Lecture: 0 hours - Lab: 4 hours

LAND 117 Landscape Maintenance Laboratory (SP) (On Demand) 2 credits

This course will expose the student to practical uses in the application of maintenance procedures in commercial and residential landscapes.

Lecture: 0 hours - Lab: 4 hours

Lab fee: \$20.00

LAND 152 Site Planning (A, SP) 4 credits

This course identifies the elements of a site and covers influences, methods and examples of site planning for environmental design projects. Emphasis is on the interdisciplinary nature of site planning. Regulatory and technical requirements are presented. Creation and evaluation of prototypical site planning projects is included.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: LAND 102 or ARCH 111 or SURV 141 or permission of instructor
Lab fee: \$20.00

LAND 201 Landscape Pest Control (A, SU) 3 credits

This course will study basic control methods as they apply to insects, fungi, and bacteria, biotic and other pests in the landscape. Identification of pests as well as mechanical, cultural, biological and chemical controls will be discussed.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: LAND 105 or LAND 205 or permission of instructor

Lab fee: \$5.00

LAND 202 Planting Design (W, SU) 4 credits

This course builds on skills learned in LAND 102 and emphasizes graphic representations of plant materials and landscape structures.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: LAND 152, 206 and 105 and/or 205

Lab fee: \$20.00

LAND 203 Landscape Irrigation (A, W) 3 credits

This course will study the design principles of landscape irrigation systems. Cost/ estimation factors will also be discussed.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: LAND 102 and MATH 104 or permission of instructor.

Lab fee: \$12.00

LAND 204 Turfgrass Management (W, SP) 3 credits

Students will learn the basic principles of turfgrass science and culture, specifically turfgrass identification, turf disease diagnosis, turf insect pest control, turf weed control and specific turfgrass cultural and management practices.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: LAND 101, LAND 201 and BIO 125 or LAND 107 or permission of instructor.

Lab fee: \$10.00

LAND 205 Autumn Landscape Plants (A, SU) 4 credits

The plants in this course are not the same as those covered in LAND 105. This course will study the identification parameters, landscape features and growing conditions of trees and shrubs of the midwest climate zone. This class will combine both in-class and field experience.

Lecture: 3 hours – Lab: 3 hours

Lab fee: \$10.00

LAND 206 Landscape Graphics (A, SP) 4 credits

This course will study the graphic symbols used to create landscape drawings. Included will be such information as color renderings, graphic representation of trees and shrubs, and shadowing.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: LAND 102

Lab fee: \$15.00

LAND 207 Landscape Construction (A, SP) 3 credits

This course will study the design and construction principles of landscape decks, patios, site fixtures, etc., and design projects of each will be created.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: LAND 152

Lab fee: \$15.00

LAND 208 Interior Plants (W) 3 credits

This course will study the features and growing conditions of indoor plant materials and maintenance procedures for same.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$10.00

LAND 210 Evergreen Landscape Plants (W) 4 credits

This course will study the identification parameters, landscape features and growing conditions of evergreen trees and shrubs of the midwest climate zone.

Lecture: 3 hours – Lab: 3 hours

Lab fee: \$10.00

LAND 217 Landscape Construction Laboratory (SU) (On Demand) 2 credits

This course will expose the student to the practices and application of landscape construction.

Lecture: 0 hours - Lab: 4 hours

Lab fee \$20.00

LAND 222 Landscape Operations (W, SU) 4 credits

This is a capstone course in the Landscape major; students will receive an overview of the technical operations of a landscape design/build firm. Students will work on group and individual class projects simulating the day-to-day business operations of a landscape firm.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: LAND 202, LAND 203, LAND 207 and BMGT 111

Lab fee: \$15.00

LAND 291 Field Experience (SU) 4 credits

Off-campus field experience in the landscape industry. The field experience reinforces formal education received in the landscape program, with actual work conditions and job experience. “N” credit will not be allowed for this course.

Lecture: 0 hours – Lab: 48 hours

Prerequisite: Permission of instructor

Lab fee: \$10.00

LAND 295, 296, 297 Special Topics (On Demand) 1-5 credits

These courses allow for landscape special topics to be offered in a timely and responsive way.

Lecture and/or Lab Hours: Vary

Prerequisite: Permission of instructor.

Latin (LATN)

LATN 101 Elementary Latin I (A) 5 credits

Introduction to the fundamentals of Latin with practice in reading and writing. Includes selected studies in culture. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

LATN 102 Elementary Latin II (W) 5 credits

Continuation of LATN 101 with further development of reading and writing skills and further study of culture. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: LATN 101 with a grade of “C” or better

Lab fee: \$6.00

LATN 103 Intermediate Latin I (SP) 5 credits

Continuation of LATN 102. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: LATN 102 with a grade of “C” or better

Lab fee: \$6.00

LATN 104 Intermediate Latin II (SU) 5 credits
Continuation of LATN 103. Meets elective requirements in the Associate of Arts and Associate of Sciences Degree programs and transfer requirements in foreign languages and literature.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: LATN 103 with grade of “C” or better
Lab fee: \$6.00

LATN 290 Capstone in Latin (On Demand) 3 credits
For students wishing to fulfill the capstone requirement on Latin
Lecture: 2 hours – Lab: 2 hours
Prerequisite: LATN 104
Lab fee: \$5.00

LATN 299 Special Topics in Latin (On Demand) 1-5 credits
Individual Studies
Lab fee: \$2.00

Law Enforcement (LAWE)

LAWE 101 Introduction to Criminal Justice (A, SP) 3 credits
This course examines the development of law and the systems and procedures developed by society for dealing with law violations. Emphasis will be placed on the three major components of the system: the police, courts, and corrections.
Lecture: 3 hours – Lab: 0 hours

LAWE 102 Patrol Procedures (A, SP) 3 credits
This course covers the basic concepts of police patrol. The purpose of patrol and various patrol strategies will be examined. Calls for service and response tactics as well as arrest techniques, vehicle stops, and prisoner booking and handling are covered.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$ 7.00

LAWE 103 Academy Orientation (W, SU) 2 credits
This course will serve as an orientation to the law enforcement profession and the Columbus State Police Academy.
Lecture: 2 hours – Lab: 0 hours

LAWE 104 Government and the Law (A, W, SP, SU) 3 credits
The role of local government in the community, its structure, organization, and responsibility are covered. Local government politics and the community also are reviewed. Urban, suburban, rural and community structure will be discussed in relationship to delivery of services.
Lecture: 3 hours – Lab: 0 hours

LAWE 110 Criminal Investigation I (A, SP) 4 credits
Principles and techniques of criminal investigation, including those techniques and skills used in the investigation of major crimes such as homicide, burglary, robbery, auto theft, arson and sex offenses.
Lecture: 3 hours – Lab: 2 hours
Lab fee: \$5.00

LAWE 111 Criminalistics I (A, SP) 3 credits
An introduction to criminalistics laboratory techniques, includes the recognition, collection, and preservation of evidence and its preparation for court presentation. An introduction to fingerprint comparison is presented.
Lecture: 1 hours – Lab: 4 hours
Lab fee: \$10.00

LAWE 112 Criminal Investigation II (W, SU) 4 credits
A continuation of LAWE 110. Emphasis will be placed on the scientific analysis of evidence and proper methods for collection and preservation of trace evidence.

Lecture: 3 hours – Lab: 2 hours
Prerequisite: LAWE 110
Lab fee: \$5.00

LAWE 113 Criminalistics II (W, SU) 2 credits
Advanced study of criminalistics laboratory techniques which include examination techniques for blood, hair and fiber, fire-arms identification, toolmark comparison, latent fingerprints, questioned document examination and trace evidence.
Lecture: 0 hours – Lab: 4 hours
Lab fee: \$15.00

LAWE 115 Community and Personal Relations (W, SU) 3 credits
This course examines the complex relationship between the police and the public they serve. Areas of potential problems will be discussed and programs and procedures for enhancing the relationship will be presented.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$5.00

LAWE 120 Criminology (A, SP) 3 credits
An exploration of the crime problem in the United States. Theories of the causation of crime will be analyzed and critiqued.
Lecture: 3 hours – Lab: 0 hours

LAWE 121 Juvenile Delinquency (SP) 3 credits
A study of the nature and causes of delinquent activity by juveniles. Though the development of an understanding of causative factors, appropriate criminal justice responses to such activity can be planned.
Lecture: 3 hours – Lab: 0 hours

LAWE 122 Criminal Law (On Demand) 3 credits
A study of the development of criminal law in the United States. The common law theories upon which law in this country is based will be explored. Specific topics will include parties to crime, capacity to commit crimes, defenses, and the laws defining specific crimes.
Lecture: 2 hours – Lab: 2 hours

LAWE 124 Penology (A, SP) 3 credits
Course offers an introduction to the field of corrections. The history and goals of corrections will be explored, and students will receive an overview of the processing of offenders from arrest through final release.
Lecture: 3 hours – Lab: 0 hours

LAWE 125 Traffic Accident Investigation (A, SP) 3 credits
An in-depth study of the procedure and objectives in accident investigations, including gathering facts from road, vehicle and witnesses, hit and run investigation, measurements and diagrams, utilization of skid mark evidence, proper methods of recording accident data, use of accident template, and a practical application of the recommended method of submitting the Ohio state traffic crash report.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$3.00

LAWE 128 Special Category Offenders 3 credits
This course will focus on six subject areas: treatment of sex offenders, mentally disordered offenders, mentally retarded offenders, inmates with AIDS, inmates with disabilities, and the substance abuse offender. Further attention will be directed to correctional personnel, impact of political influences, perceptions, training, problems and corrective actions.
Lecture: 3 hours – Lab: 0 hours

LAWE 135 Terrorism 3 credits
This course will examine the underlying issues of the terrorist threat, including an overview of terrorism goals, methods of attack, weapons of mass destruction, and how law enforcement can assess and deal with threats.
Lecture: 3 hours

LAWE 145 Self Defense for Women (TBA) 2 credits
Students will learn to recognize threatening behavior, situations, and appropriate responses. Simple-to-learn, basic physical defense techniques are taught. In addition, defensive devices will be discussed and demonstrated.
Lecture: 1 hours – Lab: 2 hours

LAWE 150 The Administration of Justice (A) 3 credit
The major institutions and processes in the administration of justice will be covered. The role and function of the courts, the progress of criminal and civil cases, and methods for development of cooperative arrangements with other criminal justice professionals are discussed.
Lecture: 3 hours – Lab: 0 hours

LAWE 153 Civil Liability in Law Enforcement (SP) 4 credits
Course covers potential areas of liability such as tort law, vicarious liability, and civil rights legislation.
Lecture: 4 hours – Lab: 0 hours

LAWE 155 Managing Police Operations (W) 4 credits
Managing police operational units such as investigations, patrol, internal investigations and traffic.
Lecture: 4 hours – Lab: 0 hours

LAWE 204 Juvenile Procedures (A, SP) 3 credits
Organization, functions, and jurisdiction of juvenile agencies. Processing and detention of juveniles. Statutes and court procedures relating to juveniles. Police services for juveniles and neglected children. Rights and liabilities of minors and their parents.
Lecture: 2 hours – Lab: 2 hours

LAWE 208 Community Based Corrections (W) 3 credits
This course will investigate alternative models of corrections. Various alternatives to incarceration or institutionalization, and the benefits that will derive from the placing of the offender back in the community, will be discussed.
Lecture: 3 hours – Lab: 0 hours

LAWE 210 Crisis Intervention (A, SP) 3 credits
This course provides the student with intervention strategies for dealing with persons in crisis. The areas of domestic disputes, suicide prevention, and the special problems of crime victims will be emphasized.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$10.00

LAWE 211 Institutional Corrections (A) 3 credits
An exploration of the development and the purposes of correctional institutions. Emphasis will be placed on major correctional facilities at the state and federal levels. Operation of such facilities and the care and treatment of prisoners will be examined.
Lecture: 3 hours – Lab: 0 hours

LAWE 212 Ohio Criminal Code (A, SP) 4 credits
The study of the statutes of Ohio that apply to crime and criminal procedures, with emphasis on the specific elements necessary to constitute individual crimes.
Lecture: 3 hours – Lab: 2 hours

LAWE 215 Introduction to Cyberlaw (W) 3 credits
The technological advancements associated with computers and the World Wide Web have led to increased criminal activity involving such technology. In addition, laws regulating computer usage, the Web, and intellectual property issues, have become very complex. This course examines these issues and the difficulties associated with investigating such activities.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: CIT 101

LAWE 218 Supervision of Public Service Personnel (A, SP) 3 credits
Supervision techniques applied to public service personnel. The study of the need for job descriptions and job procedures, civil service requirements, reports, oral and written directions, work evaluation, and conference leadership. Methods of instruction effective in teaching and motivating personnel.
Lecture: 3 hours – Lab: 0 hours

LAWE 219 Correctional Law (W) 4 credits
This course will cover the various Supreme Court rulings that deal with the care and treatment of prisoners confined in institutions. It will include the use of force, the right to have visitors, receive mail, attend religious functions, and the right to treatment. The course will also cover due process of law.
Lecture: 4 hours – Lab: 0 hours

LAWE 220 Constitutional Law (A, SP) 3 credits
A study of federal and state constitutional law and the Bill of Rights with emphasis on due process of law, equal protection of the law, jury trial, and assistance of counsel. Interpretation of the Constitution by the United States Supreme Court as given in their decisions.
Lecture: 3 hours – Lab: 2 hours

LAWE 221 Counseling–Probation and Parole (SP) 4 credits
This course covers the responsibilities and duties of the correctional counselor and case worker. Emphasis is placed upon the application of professional standards of casework in the correctional setting. Emphasis is also placed on the functions of the parole and probation officers.
Lecture: 4 hours – Lab: 0 hours

LAWE 223 Correctional Administration (SP) 3 credits
This course will cover the various phases of administration as they relate to corrections. Three basic stages are covered: executive, mid-management and line operations. Each of these levels will be discussed as they relate to institutions, community-based institutions, and the operation of probation and parole. Problems and their possible solutions will be covered for each division of corrections.
Lecture: 3 hours – Lab: 0 hours

LAWE 231 Criminal Justice Planning and Analysis (W) 3 credits
Course covers decision-making and analysis, using research, police resource allocation, and project management.
Lecture: 2 hours – Lab: 2 hours

LAWE 232 Task Force/Major Case Management (A) 3 credits
The management of groups of people in concentrated effort to effectively handle all facets of a major case or in dealing with emergencies.
Lecture: 2 hours – Lab: 2 hours

LAWE 241 Correctional Internship I (TBA) 1 credit
On-the-job training in the field of corrections. The student will work in a correctional agency. The course will include interviewing convicted felons, verification of the information received, and various other duties connected with probation and parole.
Lecture: 0 hours – Lab: 10 hours
Prerequisite: LAWE 205
Corequisite: LAWE 249

LAWE 242 Community Policing (SP) 4 credits
Contemporary community policing issues such as crime prevention, community education, and police deployment strategies will be explored. Internal departmental changes and methods of obtaining cooperation and commitment by department personnel will also be examined.
Lecture: 4 hours – Lab: 0 hours

LAWE 243 Forensic Science for Law Enforcement Managers (TBA) 3 credits
Managing a forensic laboratory and/or crime scene search unit. Advanced

forensic techniques will be explored.

Lecture: 2 hours – Lab: 2 hours

LAWE 244 Budgeting and Grant Writing for Criminal Justice Admin. (TBA) 3 credits

This course examines the various frameworks for budgeting and budget management in criminal justice agencies. Students will learn a process for obtaining and managing state, federal, or foundation grants. A sample grant application will be developed.

Lecture: 2 hours – Lab: 2 hours

LAWE 245 Media and the Police (TBA) 3 credits

This course will examine the difficult relationship between the media and the police. The development of a departmental media policy and the utilization of the media for departmental advantage will be explored.

Lecture: 3 hours – Lab: 0 hours

LAWE 249 Corrections Seminar I (TBA) 1 credit

This seminar will cover the pre-sentence investigation report, its purpose, and how it is compiled. Members of the internship program will be able to discuss the problems and events that they have encountered during their work at the probation office with each other and the instructor.

Lecture: 1 hours – Lab: 0 hours

Prerequisite: LAWE 205

Corequisite: LAWE 241

LAWE 252 Police Administration (A) 3 credits

The contemporary local law enforcement agency, its functions, structure, and operational techniques. Principles of organization, staffing, budgeting, controlling, coordination, planning and research will be presented as will the development and maintenance of liaison between agencies.

Lecture: 3 hours – Lab: 0 hours

LAWE 253 Criminal Procedure (W, SU) 3 credits

A study of the rules of procedure as they apply to criminal cases and affect the ability of the officer to have the evidence he/she collects or prepares presented in court.

Lecture: 2 hours – Lab: 2 hours

LAWE 254 Correctional Internship II (TBA) 1 credit

On-the-job training in the corrections setting. The student will work in a correctional agency. The course will consist of making background investigations for a parole board, checking on inmates at various halfway houses, and interviewing persons on parole.

Lecture: 0 hours – Lab: 10 hours

Prerequisite: LAWE 241

Corequisite: LAWE 255

LAWE 255 Corrections Seminar II (TBA) 1 credit

This course is a discussion of what has occurred during the student's internship and clarification of problems. Assignment of project and explanation of reason for the project.

Lecture: 1 hours – Lab: 0 hours

Prerequisite: LAWE 249

Corequisite: LAWE 254

LAWE 256 Law Enforcement Practicum I (A, W, SP, SU) 2 credits

A guided work experience in a law enforcement agency. Students will observe and participate in a variety of law enforcement functions. Exact duties will be decided by agreement between student and the law enforcement agency. Prerequisite: Permission of the chairperson.

Lecture: 0 hours – Lab: 14 hours

Corequisite: LAWE 257

LAWE 257 Law Enforcement Practicum Seminar I (A, W, SP, SU) 1 credit

Seminar discussions of work experience and development strategies to improve work performance. Prerequisite: Permission of the

chairperson.

Lecture: 1 hours – Lab: 0 hours

Corequisite: LAWE 256

LAWE 258 Law Enforcement Practicum II (On Demand) 2 credits

A guided work experience in a law enforcement agency. Students will observe and participate in a variety of law enforcement functions. Exact duties will be decided upon by agreement between student and the law enforcement agency. Prerequisite: Permission of the chairperson.

Lecture: 0 hours – Lab: 14 hours

Corequisite: LAWE 259

LAWE 259 Law Enforcement Practicum Seminar II (On Demand) 1 credits

Seminar discussions of work experience and development of strategies to improve work performance. Prerequisite: Permission of the chairperson

Lecture: 1 hours – Lab: 0 hours

Corequisite: LAWE 258

Lab fee: \$5.00

LAWE 260 Criminal Evidence and Trial (A, SP) 3 credits

In this course, the student will study the rules of evidence as they relate to the introduction of evidence at trial. In addition to the study of rules, students will participate in a mock trial in which evidence they have collected, preserved and processed will be presented.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$5.00

LAWE 261 Defensive Driving and Emergency Response (SP) 2 credits

Defensive driving is driving to prevent accidents from occurring in spite of the actions of others or the presence of adverse conditions. Students will learn recommended driving principles and practices through vehicle operation. The student will also learn the skills necessary to administer emergency aid until assistance can be obtained.

Lecture: 0 hours – Lab: 4 hours

Lab fee: \$35.00

LAWE 263 Arrest and Control (SU) 4 credits

In this course, the student will learn the basic principles and tactics of unarmed self-defense, how to defend against physical attack, and control of aggressive behavior in effecting an arrest using minimum force.

Lecture: 1 hours – Lab: 6 hours

Prerequisite: LAWE 102

LAWE 264 Police Firearms (SU) 3 credits

Students will learn to use police firearms safely, including the pistol and shotgun. Shooting decisions and alternatives to firearm use are covered. Successful completion of the course requires compliance with current Ohio Peace Officers Training Council qualification standards.

Lecture: 0 hours – Lab: 6 hours

Lab fee: \$50.00

LAWE 265 Police Physical Fitness (A) 3 credits

This course will utilize the proven methods developed by the Aerobic Institute in measuring and attaining fitness. A baseline of fitness will be established for each student and an individual exercise program will be decided upon. Class activities may include aerobics, jogging, and if needed, weight training.

Lecture: 1 hour – Lab: 4 hours

LAWE 266 High Rise Safety (A) 2 credits

Discussions of the particular problems related to the fire safety in high-rise buildings. Students will research and establish life-safety plans for a building. Information gained from previous incidents in high-rise buildings will be utilized.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$5.00

LAWE 268 Hazardous Materials I (A) **3 credits**
An introduction to the properties and behaviors of hazardous chemicals in our environment. A study of the physical and chemical characteristics of toxic, flammable, and reactive substances in the forms of solids, liquids, and gases combined with overview of methods for safely responding to emergencies involving such materials. Emphasis will be placed on safe approach to incident scenes, positive identification of materials, and accurate analysis of the hazards presented by hazardous materials.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$6.00

LAWE 271 Contemporary Issues in Law Enforcement (SP, A) **3 credits**
A review of important facts in modern law enforcement along with an examination of current topics and trends.
Lecture: 3 hours – Lab: 0 hours

LAWE 273 Legal Computing **2 credits**
Course is designed to focus on legal-style microcomputing for law enforcement and legal assisting personnel. Emphasis is on the legal history, copyright, computer crimes, computer security and legal computer systems.
Lecture: 2 hours – Lab: 1 hours
Prerequisite: CIT 101/ Optional LEGL 251

LAWE 275 Police Management Assessment (SP) **4 credits**
A capstone course in which students participate in typical assessment center evaluation techniques. These techniques include in-basket/out-basket, written problem solving, structured oral exercise, leaderless group, and subordinate counseling.
Lecture: 3 hours – Lab: 2 hours

LAWE 276 Criminalistic III (SP) **3 credits**
Advanced study of forensic laboratory techniques. The student will perform or view examination techniques for blood, “DNA Profile Analysis”, questioned document examination, autopsy, trace evidence, drug identification, toxicology, and the forensic examination of arson and explosion trace evidence.
Lecture: 1 hour – Lab: 4 hours
Lab fee: \$25.00

LAWE 299 Special Topics in Law Enforcement **3 credits**
Special Topics in Law Enforcement is a course that utilizes a variety of instructional techniques to meet the needs of the constantly changing law enforcement, corrections, and legal community. The course will be designed with the advice of the particular group requesting the course and/or the Law Enforcement faculty, and Department Chairperson.
Lecture: 3 hours – Lab: 0 hours

Legal Assisting - See Paralegal Studies (LEGL)

Marketing (MKTG)

MKTG 101 Introduction to Retailing (A, W, SP, SU,-DL) **5 credits**
This course provides the student with an overview of current and evolving retailing trends and practices. Merchandising, sales promotion, finance, store operations and control are addressed. Special emphasis is given to the growing importance of international retailing, e-Commerce and multi-channel retailing. In addition, the course examines the impact of innovative technologies and methods used by retailers to improve store

operating efficiencies and improve customers' shopping experience.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: None
Lab fee: \$5.00

MKTG 102 Branding (W, SU,-DL) **3 credits**
This course provides the student with an overview of current and evolving branding trends and practice. The primary focus is on the importance of brands, their impact on corporate profitability, and effective principles of brand management. In addition, the course describes a disciplined process to create and implement effective brand design, identity and positioning.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: None
Lab fee: \$5.00

MKTG 111 Marketing Principles (A, W, SP, SU,-DL) **5 credits**
The fundamentals of product planning, pricing, promotion and distribution of goods and services with emphasis on the impact of a global economy and technology on marketing activities. Additional attention is given to consumer behavior, market research and market strategies. Students taking the video version of Marketing Principles may choose to rent the videos for the quarter from the ERC with pre-payment to the Discovery Exchange Bookstore.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: None
Lab fee: \$5.00

MKTG 122 Business & the Internet (A, SP,-DL) **3 credits**
An overview of how to use the Internet to gather and evaluate primary and secondary sources of business information for product development, market research, sales, advertising and promotion, and customer service/retention.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: None
Lab fee: \$13.00

MKTG 131 Market Research Principles (A, SU,-DL) **3 credits**
An introduction to the field of market research with particular emphasis on how to use research data to make better marketing decisions. Topics covered include the market research process, research design and data sources, data collection and the analysis of marketing research data.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: MKTG 111 and MATH 101 (or a higher math) or instructor approval.
Lab fee: \$5.00

MKTG 140 Introduction to Advertising and Promotion (A, SP,-DL) **4 credits**
An introduction to the critical role that advertising and promotion play in marketing activities. Topics covered include promotional program development and analysis, the communications process and evaluating an integrated marketing communications program.
Lecture: 4 hours – Lab: 0 hours
Prerequisite: MKTG 111 or instructor approval
Lab fee: \$5.00

MKTG 141 Integrated Marketing Communications (W,-DL) **3 credits**
An introduction to the fundamentals of integrated marketing communications (IMC). Emphasis will be on understanding how IMC plans are developed and executed as well as the various factors and considerations that influence this process. Students will learn how to set goals, objectives and budgets. Special emphasis will be placed on direct marketing, Internet and interactive marketing, sales promotion, publicity and public relations, and personal selling.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: MKTG 111 and MKTG 140 or instructor approval
Lab fee: \$5.00

MKTG 142 Media Buying (SU,-DL)**3 credits**

Introduction to media buying and selling with particular emphasis on the role of the various participants in the process: clients, advertising and media agencies, media sales companies, media companies, etc. Current industry selling practices will be discussed for various print and electronic media. Components of the course include media plan development, target audience(s) selection, and integration of a media plan into an advertising plan. At the completion of the course, students will have developed portfolio-ready examples of work

Lecture: 3 hours – Lab: 0 hours
Lab fee: \$5.00

MKTG 145 Services Marketing (SU,-DL)**3 credits**

A study of the characteristics of services, their contribution to an economy, service quality, service customer behavior and the relationship between organizational performance and customer retention. Emphasis will be placed on customer satisfaction measurement, coordination issues between marketing and operations in the design and implementation of service delivery, and the utilization of emerging technology.

Lecture: 3 hours - Lab: 0 hours
Prerequisite: MKTG 111
Lab Fee: \$5.00

MKTG 146 Non-Profit Marketing (SP,-DL)**3 credits**

This course will give students an understanding of the basic organizational structures, systems and practices of nonprofit organizations. Emphasis will be placed on identifying the various types of nonprofit organizations, nonprofit marketing mixes, and nonprofit marketing strategies. The role of technology in the delivery of effective service and administration for nonprofit organizations will also be examined.

Lecture: 3 hours – Lab: 0 hours
Lab fee: \$5.00

MKTG 150 Introduction to E-Commerce (A, SP, SU,-DL)**3 credits**

Overview of the marketing and technical aspects of e-Commerce. Students are introduced to basic network concepts and protocols; how various markets (consumer, business-to-business, and government) make use of e-Commerce; the four fundamental marketing considerations of product, price, distribution/place and promotion as informed by interactive media; and, a brief overview of the design, financial and ethical aspects of e-Commerce.

Lecture: 2 hours – Lab: 2 hours
Lab fee: \$5.00

MKTG 205 Quantitative Methods for Retailing (A,-DL)**5 credits**

This course provides the student with an overview of the impact of merchandising strategies on the fiscal management of store operations. Special emphasis is given to the mathematical tools that aid in merchandise planning, selection, and pricing. Students will use basic math formulas that are used by buyers, department managers and store owners in order to operate their businesses, stores or departments profitably.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: MKTG 101
Lab fee: \$5.00

MKTG 213 Merchandise Buying and Management (SP,-DL)**4 credits**

An in-depth review of the many different duties of a buyer and the role the buyer plays in assuring profitability. Topics covered include the buyer's role in risk management, inventory shortage control, people management, promotion and the legal environment that impacts retailing.

Lecture: 4 hours – Lab: 0 hours
Prerequisite: MKTG 101
Lab fee: \$5.00

MKTG 221 Consumer Behavior (W, SU,-DL)**3 credits**

Consumer behavior is designed to assist the student in developing a fuller understanding of the influences, both internal and external, that determine consumer behavior.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: MKTG 111 or instructor approval.
Lab fee: \$5.00

MKTG 223 Sales Principles & Practices (A, SP,-DL)**4 credits**

Practical application of selling theory in a variety of personal selling situations. All phases of the selling process (from initial contact to the close of the sale) are taught.

Lecture: 4 hours – Lab: 0 hours
Prerequisite: MKTG 111 or instructor approval
Lab fee: \$5.00

MKTG 224 Public Relations (A,-DL)**3 credits**

Public Relations examines both the theoretical and practical factors that contribute to a firm's image among its many publics. The emphasis is on public relations as a function of management as well as an adjunct of promotion.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: MKTG 111 or instructor approval
Lab fee: \$5.00

MKTG 226 Customer Service Principles & Practices (A, SP,-DL)**4 credits**

A study of customer service principles used in business. Concepts and key elements will be explored. Techniques will be developed for small business applications. Topics include customer service overview, key elements of customer service, trends, industry examples, business impact and legal implications.

Lecture: 4 hours – Lab: 0 hours
Prerequisite: MKTG 111 or instructor approval
Lab fee: \$5.00

MKTG 229 Organizational Marketing (A, SP,-DL)**3 credits**

A comprehensive overview of the marketing principles and practices utilized in business-to-business marketing. An empirical approach is taken to analyzing marketing strategy in business to business environments. Additional emphasis is placed on organizational marketing, future trends and the impact of technology on business-to-business marketing.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: MKTG 111 or instructor approval
Lab fee: \$5.00

MKTG 236 Direct Marketing (SP,-DL)**3 credits**

A survey of the direct marketing process including the theory and practice of direct marketing, its function and organization. Topics covered include direct response television/radio, database marketing, list selection and evaluation, direct marketing media and planning. Special emphasis is placed on how to integrate direct marketing into the overall marketing mix.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: MKTG 111 or instructor approval
Lab fee: \$5.00

MKTG 237 Database Marketing (W,-DL)**3 credits**

An overview of the use of databases in consumer and business-to-business marketing to both acquire and retain customers. Particular emphasis is placed on developing in-house databases, purchasing lists and managing a marketing database.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: Instructor approval
Lab fee: \$5.00

MKTG 241 Marketing Practicum I (A, W, SP, SU,-DL)**4 credits**

Supervised on-the-job application of knowledge and skills acquired in the classroom. Internship applications must be filed with the Department at least 2 months prior to the internship start date. This course is graded on a Satisfactory/Unsatisfactory basis.

Lecture: 0 hours – Lab: 28 hours
Prerequisite: 12 hours in technology and permission of instructor
Corequisite: MKTG 242
Lab fee: \$5.00

MKTG 242 Marketing Seminar I (A, W, SP, SU,–DL) 2 credits
Application of marketing knowledge to specific areas of on-the-job internship. Internship applications must be filed with the Department at least 2 months prior to the internship start date. This course is graded on a Satisfactory / Unsatisfactory basis.
Lecture: 0 hours – Lab: 4 hours
Prerequisite: Open to Marketing students only and permission of instructor
Corequisite: MKTG 241
Lab fee: \$5.00

MKTG 251 Marketing Practicum II (On Demand,–DL) 4 credits
Continuation of MKTG 241. Open to Marketing students only. Internship applications must be filed with the Department at least 2 months prior to the internship start date. This course is graded on a Satisfactory/Unsatisfactory basis.
Lecture: 0 hours – Lab: 28 hours
Prerequisite: MKTG 241 and advisor approval required the quarter before the student actually begins the internship; open to Marketing students only
Corequisite: MKTG 252
Lab fee: \$5.00

MKTG 252 Marketing Seminar II (On Demand,–DL) 2 credits
Application of marketing knowledge to specific areas of on-the-job internship. Internship applications must be filed with the Department at least 2 months prior to the internship start date. This course is graded on a Satisfactory / Unsatisfactory basis.
Lecture: 0 hours – Lab: 4 hours
Prerequisite: MKTG 242, open to Marketing students only
Corequisite: MKTG 251
Lab fee: \$5.00

MKTG 263 Direct Marketing Creative & Financial Analysis (A,–DL) 4 credits
Overview of how to create and evaluate effective direct response materials. Topics covered include establishing a “unique selling proposition,” copywriting guidelines, how to use graphic support, offer development, and the inclusion of token/stamps to increase audience interaction. Special attention is given to how to select appropriate formats including computerized letters, self-mailers, broadsides, and brochures.
Lecture: 4 hours – Lab: 0 hours
Prerequisite: MKTG 236 or permission of instructor
Lab fee: \$5.00

MKTG 265 Understanding Interactive Users (SP,–DL) 3 credits
A comprehensive model for understanding consumer decision making in an interactive environment. Emphasis is placed on the differences and similarities between classic research techniques and traditional consumer behavior models and their interactive complements. Particular emphasis is placed on the techniques and trends used to conduct online research, including how to leverage existing sources, online chat-based sessions, email feedback, and online focus groups.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$5.00

MKTG 266 Marketing Communications on the Web (W,–DL) 3 credits
Introduction to the marketing communications opportunities and challenges facing Web marketers. Topics covered include developing an online marketing strategy, online selling, Web-based promotion, customer service and publicity. Special emphasis is placed on emerging e-Commerce strategies, such as auditing effective of online advertising, permission marketing, affiliate programs and e-mail strategies.

Lecture: 2 hours – Lab: 2 hours
Lab fee: \$5.00

MKTG 270 Global Marketing (A, SP - DL) 6 credits
A capstone course designed to develop a broader understanding of the marketing function and its relationship to business strategy in the context of a global marketing environment.
Lecture: 4 hours – Lab: 4 hours
Prerequisites: 12 hours of Marketing or Supply Chain Management courses, CIT 101, FMGT 201 or ACCT 106 and permission of instructor
Lab Fee: \$5.00

MKTG 285 Advertising & Promotion on the Web (A, SP,–DL) 1 credit
This course provides the student with an overview of how the Internet can be used as a part of an organization’s advertising and promotion strategy. The focus is on the Internet as another means of communicating with an organization’s various target markets.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 286 Customer Service on the Web (A, SP,–DL) 1 credit
This course provides the student an opportunity to see how the Internet can be used to improve the basic delivery of customer service and improve customer relations for business organizations.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 287 Public Relations on the Web (A, SP,–DL) 1 credit
The focus is on the real world use of the Internet in developing organizational objectives. Students will use the Internet to examine trends, basic concepts and current practices in public relations.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 288 Marketing Research on the Web (A, SP,–DL) 1 credit
Students will use the Internet to gather information on customers, business organizations, and nonprofit institutions. Attention will be given to using the Internet as a tool to find the best sources of information to solve real-world marketing problems.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 289 Direct Marketing on the Web (A, SP,–DL) 1 credit
Students will use the Internet as a tool in the direct marketing process. The focus is on using the Internet as a vehicle to create databases and as a direct response mechanism for target markets.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 290 Government Marketing on the Web (SP,–DL) 1 credit
A study of the characteristics of government and its utilization of emerging technology to market services to and communicate with citizens. The course will examine the relationships between government and citizens with an emphasis on the use of Web-based technology to enhance those relationships.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 292 Non-Profit Marketing Using the Web (SU,–DL) 1 credits
A study of the characteristics of nonprofit organizations and the utilization of emerging technology to market services to, raise funds and communicate with people. The course will examine the relationships between nonprofit organizations and service consumers and funding agents with an emphasis on the use of Web-based technology to enhance those relationships.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$5.00

MKTG 297-298 Special Topics in Marketing (On Demand,-DL)
1 - 3 credits

Detailed examination of various topics in marketing.

Prerequisites: Vary.

Lab Fees: Vary.

Lecture: 1 to 3 hours – Lab: 0 hours

Massage Therapy (MASS)

MASS 235 Massage Law and Business Principles for Massage Therapy (AU, W, SP, SU,-DL)
4 credits

This course provides a general overview of the legal system, including criminal and civil law. An in depth review of the statutes and administrative rules that govern massage therapy in Ohio provided. The course will also provide a study of basic business principles as they apply to the massage therapist.

Prerequisites: Acceptance into the program

Lecture: 4 hours

Lab fee: \$10.00

MASS 236 Medical Ethics for Massage Therapists (A, SP) 3 credits

An introduction to the professional practice of health care including the role of the practitioner, relationships with other health care providers, privacy and confidentiality, the concepts of liability, malpractice and negligence.

Prerequisite: MASS 262

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$5.00

MASS 261 Massage Technique I (A, SP) 6 credits

Introduction to the professional practice of massage therapy including hygiene, touch, stroking, friction, kneading, vibration, and percussion.

Lecture: 3 hours – Lab: 6 hours

Prerequisite: Acceptance into the program

Corequisite: MASS 271

Lab fee: \$50.00

MASS 262 Massage Technique II (W, SU) 6 credits

Introduction to the professional practice of massage therapy including the effects, indications, and contraindications of massage upon various body systems.

Lecture: 3 hours – Lab: 6 hours

Prerequisite: MASS 261

Corequisite: MASS 272

Lab fee: \$50.00

MASS 271 Massage Anatomy & Physiology I (A, SP) 5 credits

Investigation of the various human body systems, their structure and function as required by the State Medical Board of Ohio for licensure as a Massage Therapist.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: BIO 261 and acceptance into the program

Corequisite: MASS 261

Lab fee: \$50.00

MASS 272 Massage Anatomy & Physiology II (W, SU) 5 credits

Investigation of the various human body systems, their structure and function as required by the State Medical Board of Ohio for licensure as a Massage Therapist.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: MASS 271

Lab fee: \$50.00

MASS 273 Massage Anatomy & Physiology III (AU, SP) 5 credits

Investigation of the various human body systems, their structure and function as required by the State Medical Board of Ohio for licensure as a Massage Therapist.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: MASS 272

Lab fee: \$50.00

MASS 274 Massage Anatomy & Physiology IV (W, SU) 5 credits

Investigation of the various human body systems, their structure and function as required by the State Medical Board of Ohio for licensure as a Massage Therapist.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: MASS 273

Lab fee: \$50.00

MASS 292 Massage Practicum I (A, SP) 5 credits

This course is an introduction to the clinical practice of massage therapy. The student will learn new techniques with specific applications for clinical situations. Students will have the opportunity to hone their clinical skills with experience gained in the student clinic.

Lecture: 3 hours – Lab 6 hours

Prerequisites: Successful completion of MASS 262 and MASS 272 or permission of the instructor

Lab fee: \$50.00

MASS 294 Massage Practicum II (W, SU) 5 credits

This course is a continuation of MASS 292. The topics to be covered include, but are not limited to, different therapeutic approaches to the treatment of conditions that may benefit from the application of massage. This course includes additional clinical experience affording students the opportunity to refine their treatment skills and professional approach to the practice of massage therapy.

Lecture: 3 hours – Lab 6 hours

Prerequisites: Successful completion of MASS 292 and MASS 273 or by permission of the instructor

Lab fee: \$50.00

MASS 296 Massage Therapy Board Review (A, SP) 2 credits

This course provides an overview of the Basic Sciences and Limited Branch sections of the Massage Therapy Program. The course is designed to assist in a massage student's preparation for the State of Ohio Medical Board licensure exam for Massage Therapy.

Lecture: 2 hours - Lab: 0 hours

Prerequisite: MASS 274

Corequisite: MASS 294

Lab fee: \$0

MASS 298 Special Topics in Massage (SU, W) 3 credits

This course serves to bring together concepts discussed in previous program courses. Topics of discussion will revolve around massage therapy techniques other than Swedish Massage. Topics may include but are not limited to Trigger Point Therapy, Post Isometric Muscle Release, Positional Release Techniques and other therapeutic techniques. Development and modification of institutional programming based on individual and group needs.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: MASS 262

Co-requisite MASS 272

Lab fee: \$50.00

MASS XXX Massage Therapy Electives (A, W, SP, SU) 5 credits

These courses provide massage therapy students with the ability to personalize their training program to better aid them once in the workforce. The approved technique elective courses are SES 231, SES 241, MULT 103, NURC 175, NURC 176, NURC 190, and MASS 298.

Lecture: 2-5 hours – Lab: 0

Prerequisites: Acceptance into the program

Mathematics (MATH)

MATH 100 Calculations and Dosages (A, W, SP, SU) 2 credits

Course presents a review of the fundamental operations of arithmetic with fractions and decimal fractions; ratio and proportion calculations; an introduction to the metric and apothecary systems of measures; metric-apothecary conversions; strengths of solutions; calculating medication dosages; children's dosages; intravenous calculations. Meets degree requirement for the Veterinary and Medical Assisting Technologies and the Practical Nursing Program.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: DEV 030 with a grade of “C” or higher

Lab fee: \$1.00

MATH 101 Business Mathematics (A, W, SP, SU,–DL) 5 credits

Course covers percents and the percent formula; gross earnings; FICA and withholding; trade discounts; mark-up and mark-down; simple and compound interest and present value; simple discount notes; annuities and loan amortization; and depreciation schedules. Also offers an introduction to descriptive statistics, mean, median, mode, and graphs. Includes applications labs using Excel. This course has traditional, hybrid, and Web section offerings. Meets degree requirement for the A.A.S. degree in several technical programs.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: DEV 031 with a grade of “C” or higher or by placement

Lab fee: \$5.00

MATH 102 Beginning Algebra I (A, W, SP, SU, –DL) 4 credits

This course is a remedial preparatory course designed to improve the student's algebra and problem solving abilities. The course includes the real number system; order of operations; simplifying expressions; solving linear equations and inequalities in one variable; applications and modeling; overview of graphing; linear equations in two variables; and relations and functions. These topics are taught using an approach that integrates algebraic, graphic and numeric methods whenever possible. This course has both hybrid and Web section offerings. Not open to students with credit for MATH 103 or above. A TI-83/84 graphing calculator is required. This course is offered in both traditional and computer-based formats.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: DEV 031 with a grade of “C” or higher, or by placement

Lab fee: \$3.00

MATH 103 Beginning Algebra II (A, W, SP, SU,–DL) 4 credits

This course is a continuation of MATH 102. This course is a remedial preparatory course designed to improve the student's algebra and problem-solving abilities. The course includes functions; systems of equations in two variables; applications and modeling; properties of exponents; scientific notation; polynomial arithmetic, factoring and equation solving; rational expression arithmetic and simplification; and complex fraction simplification. These topics are taught using an approach that integrates algebraic, graphic and numeric methods whenever possible. This course has both hybrid and Web section offerings. Not open to students with credit for MATH 104 or above. A TI-83/84 graphing calculator is required. This course is offered in both traditional and computer-based formats.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: MATH 102 with a grade of “C” or higher, or by placement

Lab fee: \$3.00

MATH 104 Intermediate Algebra (A, W, SP, SU,–DL) 5 credits

This course is a remedial preparatory course designed to improve the student's algebra and problem-solving abilities. The course includes interval notation; absolute value, rational, radical and quadratic equations; absolute value and polynomial inequalities in one variable; linear inequalities in two variables; compound inequalities in one and two variables; operations on radical expressions and expressions containing

rational exponents; complex number system introduction; and applications and modeling. These topics are taught using an approach that integrates algebraic, graphic and numeric methods whenever possible. This course has traditional, hybrid, and Web section offerings. Not open to students with credit for MATH 110, 111, 112, 113, 116, 125, 130, or 148 and above. A TI-83/84 graphing calculator is required.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 103 with a grade of “C” or higher, or by placement

Lab fee: \$3.00

MATH 105 Fundamental Mathematics Concepts for Teachers I (A, W, SP, SU, –DL) 5 credits

This course is designed to introduce the basic concepts of arithmetic and problem solving as appropriate for primary and middle school teachers. Development of these concepts will focus on the Ohio Standards and the Grade Level indicators. Instruction will also focus on the development of these concepts through the use of hands on manipulatives, calculators, and other appropriate technology. The role of technology and the NCTM Standards for the teaching and learning mathematics will be demonstrated, explored and discussed. This course has both traditional and Web section offerings.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 104 or MATH 110 with a grade of “C” or higher, or by placement

Lab fee: \$2.00

MATH 106 Fundamental Mathematics Concepts for Teachers II (A, W, SP, SU) 5 credits

A continuation of MATH 105. Development of basic concepts of Inductive Geometry, Deductive Geometry, Measurement, and Informal Logic as appropriate for primary and middle school teachers. Development of these concepts will focus on the Ohio Standards and the Grade Level indicators. Instruction will also focus on the development of these concepts through the use of hands on manipulatives, calculators, and other appropriate technology. The role of technology and the NCTM Standards for the teaching and learning of mathematics will be demonstrated, explored and discussed.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 105 with a grade of “C” or higher

Lab fee: \$2.00

MATH 107 Condensed Algebra I (A, W, SP, SU) 5 credits

This course is intended for those students who need a quicker review of algebra than provided in MATH 102 and 103. This course is a remedial preparatory course designed to improve the student's algebra and problem-solving abilities. This course includes the real number system; order of operations; simplifying expressions; solving linear equations and inequalities in one variable; applications and modeling; overview of graphing; linear equations in two variables; relations and functions; compound inequalities in one and two variables; absolute value equations and inequalities in one variable; linear inequalities in two variables; systems of equations in two variables; properties of exponents; scientific notation; and polynomial arithmetic. These topics are taught using an approach that integrates algebraic, graphic and numeric methods whenever possible. Not open to students with credit for MATH 110, 111, 112, 113, 116, 125, 130 or 148 and above. A TI-83/84 graphing calculator is required.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: By COMPASS placement or department chairperson approval

Lab fee: \$3.00

MATH 110 Condensed Algebra II (A, W, SP, SU) 5 credits

This course is intended for those students who need a quicker review of algebra than provided in MATH 103 and 104. This course is a continuation of MATH 107 and is a remedial preparatory course designed to improve the student's algebra and problem-solving abilities. This course includes properties of exponents; scientific notation; polynomial arithmetic; factoring and equation solving; rational expression arithmetic and simplification;

complex fraction simplification; rational, radical and quadratic equations; polynomial inequalities in one variable; operations on radical expressions and expressions containing rational exponents; complex number system introduction; and applications and modeling. These topics are taught using an approach that integrates algebraic, graphic and numeric methods whenever possible. Not open to students with credit for MATH 111, 112, 113, 116, 125, 130 or 148 or above. A TI-83/84 graphing calculator is required.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 107 with a grade of “C” or higher, or by placement
Lab fee: \$3.00

MATH 111 Technical Mathematics I (A, SP) 4 credits

A brief review of scientific notation and other algebraic concepts; dimensional analysis; significant digits; introduction to complex numbers; solutions to quadratic equations and applications of the quadratic function; solving formulas; ratio-proportion; direct and inverse variation; algebraic functions and rectangular coordinates; solutions to 2×2 linear systems; right triangle trigonometry. Lab work with a TI-83/84 Plus graphing calculator will be included. Not open to students with credit for MATH 148. Meets degree requirement for Electronic Engineering, Mechanical Engineering, Computer Electronics, Quality Assurance, Electro-Mechanical, and Aviation Technologies.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: MATH 103 with a grade of “C” or higher, or by placement
Lab fee: \$2.00

MATH 112 Technical Mathematics II (W, SU) 4 credits

Periodic functions with emphasis on graphing the Sine and Cosine curves; exponential and logarithmic functions; vectors and oblique triangles using the Law of Sines and the Law of Cosines; sequences, series, and summation notation; solving radical equations and equations in quadratic form; solving linear, polynomial, rational and absolute value inequalities; the equations of lines and circles. Lab work with a TI-83/84 Plus graphing calculator will be included. Not open to students with credit for MATH 150. Meets degree requirement for Mechanical Engineering, Quality Assurance, and Electro-Mechanical Technologies.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: MATH 111 with a grade of “C” or higher
Lab fee: \$2.00

MATH 116 Mathematics for the Liberal Arts (A, W, SP, SU, –DL) 5 credits

A survey of modern mathematical topics relevant to everyday life intended for students who are not majoring in the physical sciences. This course applies critical thinking and problem solving skills to topics such as elementary graph theory, the mathematics of voting and apportionment, and probability. A TI-83/84 graphing calculator is required. This course is designed for the student who does not intend to take additional courses in mathematics. This course has traditional, hybrid, and Web section offerings. Meets the general education requirement for the A.A. Degree. Not open to students with credit for MATH 130 or 148 or above.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 104 with a grade of “C” or higher, or by placement
Lab fee: \$3.00

MATH 121 Mathematics for Computer Technology (On Demand) 5 credits

A study of fixed and floating-point real numbers, significant digits, scientific and normalized notations; a look at algorithm, flowchart, and pseudocode forms; a comparison of decimal, binary, octal, and hexadecimal numeration systems, conversions, and arithmetic in those systems; definitions, symbols, and operations in set theory; logical operators with truth tables and flowcharts and Boolean Algebra.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 103 with a grade of “C” or higher, or by placement
Lab fee: \$2.00

MATH 130 Mathematical Analysis for Business (A, W, SP, SU) 5 credits

A review of applications of equations, inequalities, and function notation. An introduction to: graphs of functions, translations and reflections of graphs of functions; modeling of linear, quadratic, exponential, and logarithmic functions; matrices; addition, subtraction, multiplication, row reduction, and solving linear systems using row reduction; the mathematics of finance: compound interest, annuities, amortization and sinking funds. Business applications evidenced throughout. A TI-83/84 graphing calculator is required. Not open to students with credit for MATH 116, 125, 148, or MATH 150. Meets general education requirement for the A.A. degree for a student planning to transfer to a business college at a four-year university.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 104 or MATH 110 with a grade of “C” or higher, or by placement
Lab fee: \$2.00

MATH 131 Business Calculus I (A, W, SP, SU) 5 credits

An introduction to differential calculus: limits, continuity, derivatives, rules for differentiation, derivatives of logarithmic and exponential functions, extrema, concavity and applied maxima and minima problems. Business applications stressed throughout. A TI-83/84 graphing calculator is required. Not open to students with credit for MATH 151. Meets general education requirement for the A.A. degree for a student planning to transfer to a business college at a four-year university.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 130 or MATH 148 with a grade of “C” or higher or department chairperson approval
Lab fee: \$2.00

MATH 132 Business Calculus II (A, W, SP, SU) 5 credits

An introduction to integral calculus and multivariable calculus; anti-derivatives, definite integrals, area under a curve; Fundamental Theorem of Calculus; techniques of integration; differential equations; functions of several variables; partial derivatives; and extrema of functions of two variables. Business applications shown throughout. A TI-83/84 graphing calculator is required. Not open to students with credit for MATH 152. Meets general education requirement for the A.A. degree for a student planning to transfer to a business college at a four-year university.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 131 with a grade of “C” or higher
Lab fee: \$2.00

MATH 135 Elementary Statistics (A, W, SP, SU, –DL) 5 credits

This course is designed to acquaint students with statistical methods used in gathering and analyzing data. The course includes sampling methods and data classification; descriptive statistics; percentiles and z-scores; basic concepts in probability; binomial and normal probability distributions; the Central Limit Theorem; estimating population parameters; testing hypothesis; and linear correlation and regression. A TI-83/84 graphing calculator is required. Not open to students with credit for MATH 233. This course has traditional, hybrid, and Web section offerings. Meets basic related requirements for several A.A.S. Degree technical programs. MATH 135 may be available as an honors class.

Lecture: 5 hours – Lab: 1 hour

Prerequisite: MATH 103 with a grade of “C” or higher, or by placement
Lab fee: \$6.00

MATH 147 Trigonometry Module (On Demand) 1.2 credits

Right triangle and unit circle trigonometry is studied along with related trigonometric applications. A TI-83 graphing calculator is required. Calculators that can do symbolic manipulations are not allowed. This module is intended to prepare students who have an adequate algebra background but lack the necessary trigonometry to succeed in Physics 117, Physics 181, or Physics 183.

Lecture: 1.2 hours – Lab: 0 hours

Prerequisite: Permission from the Mathematics Department chairperson
Lab fee: \$0

MATH 148 College Algebra (A, W, SP, SU,–DL) 5 credits

The concept of function is used to analyze quadratic, higher degree polynomial, and rational functions. The function concept is applied to solving related equations and inequalities. Right triangle trigonometry is included, along with related applications. Conic sections are defined and analyzed. A TI-83/84 graphing calculator is required. Calculators that can do symbolic manipulations are not allowed. This course has traditional, hybrid, and Web section offerings., Meets general education requirement for A.A. degree. Not open to students with credit for MATH 150 and above. Can be substituted for MATH 130.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 104, MATH 110, or MATH 111 with a grade of “C” or higher, or by placement

Lab fee: \$2.00

MATH 150 Pre-Calculus (A, W, SP, SU) 5 credits

A continuation of the study of functions, including the exponential, logarithmic, and trigonometric functions; triangle trigonometry, analytic trigonometry; applications of trigonometry; polar coordinates; vectors; and parametric equations. A TI-83/84 graphing calculator is required. Calculators that can do symbolic manipulations are not allowed. Meets general education requirement for A.A. degree. Not open to students with credit for MATH 151 or above.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 148 with a grade of “C” or higher

Lab fee: \$2.00

MATH 151 Calculus and Analytic Geometry I (A, W, SP, SU) 5 credits

Introduction to differential calculus: functions, limits, continuity, derivatives, differentiation rules, derivatives of the trigonometric and transcendental functions, related rates, extrema, curve sketching, optimization, and antiderivatives Course topics have applications to problems in science and engineering. Meets general education requirement for A.S. and A.A. degrees. MATH 151 may be available as an honors contract.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 150 with a grade of “C” or higher, or by placement
Lab fee: \$1.00

MATH 152 Calculus and Analytic Geometry II (A, W, SP, SU) 5 credits

Introduction to integral calculus: antiderivatives, definite integral, area under a curve, Fundamental Theorem of Calculus, integration of exponential, logarithmic, trigonometric, inverse trigonometric and hyperbolic functions, volume and surface area of solids of revolution, arc-length, and methods of integration. Also includes L’Hopital’s Rule and improper integrals. Course topics have applications to problems in science and engineering. Meets general education requirement for A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 151 with a grade of “C” or higher

Lab fee: \$1.00

MATH 153 Calculus and Analytic Geometry III (A, W, SP, SU) 5 credits

Continuation of differential and integral calculus: Infinite sequences and series, conic sections, plane curves and polar coordinates, vectors in the plane and in space, and analytic geometry in space. Course topics have applications to problems in science and engineering. Meets general education requirement for A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 152 with a grade of “C” or higher

Lab fee: \$1.00

MATH 233 Statistics for Business (A, W, SP, SU) 5 credits

This course is designed to acquaint students with statistical methods used

in gathering and analyzing data. The course includes sampling methods and data classification; descriptive statistics; percentiles and z-scores; basic concepts in probability; binomial, Poisson, normal, exponential, and other discrete and continuous probability distributions; the Central Limit Theorem; and an introduction to estimating population parameters. Applications in business, management and economics are emphasized. A TI-83/84 graphing calculator is required. Meets general education requirement for A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 1 hour

Prerequisite: MATH 132 or MATH 152 with a grade of “C” or higher

Lab fee: \$6.00

MATH 254 Multivariable Calculus (A, W, SP, SU) 5 credits

Introduction to multivariable calculus. Includes vector valued functions and motion in the plane and in space, functions of several variables, partial derivatives, directional derivatives, gradients, extrema, multiple integrals, line integrals and Green’s Theorem; and applications to problems in science and engineering. Meets general education requirement for the A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 153 with a grade of “C” or higher

Lab fee: \$1.00

MATH 255 Elementary Differential Equations (SU) 5 credits

A study of the basic concepts and methods of solving ordinary differential equations, first and second order, higher order linear equations, Laplace transform methods, series solutions, and numerical solutions of differential equations. Applications to the physical sciences and engineering shown. Meets general education requirements for the A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 254 with a grade of “C” or higher

Lab fee: \$1.00

MATH 266 Discrete Mathematical Structures (W, SP, SU) 5 credits

Course presents mathematical formalization and reasoning; logic; Boolean algebra; sets, relations, and functions; recursive definitions; mathematical induction; probability theory and counting principles. Meets general education requirements for the A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 152 with a grade of “C” or higher

Lab fee: \$1.00

MATH 268 Elementary Linear Algebra (SU) 5 credits

Students will learn about linear systems, matrices, and determinants; vector spaces, \mathbb{R}^n and its subspaces; Eigenvalues, Eigenvectors, and applications; orthogonal matrices; linear transformations; complex scalars and applications. Meets general education requirement for the A.S. and A.A. degrees.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 254 with a grade of “C” or higher, or department chairperson approval

Lab fee: \$1.00

MATH 277 Probability and Statistics I (W) 5 credits

Introduction to probability, discrete and continuous random variables, probability distributions, expected value, sampling distributions, and point estimation. Applications to problems in science, engineering, computer science, and related areas explored. The MATH 277-278 sequence is intended primarily for students majoring in science, engineering, mathematics, or computer science, or for any student needing a calculus-based sequence in probability and statistics.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 254 with a grade of “C” or higher

Lab fee: \$1.00

MATH 278 Probability and Statistics II (SP) 5 credits

Continuation of MATH 277; covers one and two sample estimation; one and two sample hypothesis tests for proportions, means, variances;

goodness-of-fit; simple linear regression and correlation; nonparametric statistics; statistical quality control. Topics have applications to problems in science, engineering, computer science, and related areas. The MATH 277-278 is intended primarily for students majoring in science, engineering, mathematics, or computer science, or for any student needing a calculus-based sequence in probability and statistics.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: MATH 277 with a grade of “C” or higher

Lab fee: \$1.00

MATH 285 Ordinary and Partial Differential Equations (A, W, SP, SU) 6 credits

Course covers ordinary and partial linear and nonlinear differential equations, Fourier series, and boundary value problems. Applications to engineering and the physical sciences are noted. Lab fee: \$1.00. Prerequisite: MATH 254 with a grade of “C” or higher, or permission of the Mathematics Department. Not open to students with credit for MATH 255. Meets general education requirement for the A.S. and A.A. degrees.

Lecture: 6 hours – Lab: 0 hours

Prerequisite: MATH 254 with a grade of “C” or higher, or department chairperson approval

Lab fee: \$1.00

MATH 290 Capstone in Mathematics (On Demand) 3 credits

A capstone course focusing on mathematics. This course is intended to provide the student with an introduction to a baccalaureate major in the mathematical sciences. Topics include the historical and philosophical developments of mathematics and how they affect the advancements of mathematics; the interdependence of science, technology, and mathematics; mathematical methods and how they are used in modeling problems in science and engineering; and majoring in mathematics and professional career opportunities. The laboratory utilizes a scholarly approach to reviewing research in mathematics or the history of mathematics, taking students through the process of identifying a research topic, conducting a literature review, writing a paper, and presenting the results. This course is required of all students in the A.A. or A.S. degree program preparing for a major in one of the mathematical sciences.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: MATH 152 with a grade of “C” or higher

Lab fee: \$10.00

Mechanical Engineering Technology (MECH)

MECH 111 Manufacturing Processes (A, SU) 4 credits

This course is designed to be an introduction to primary processing and the six main secondary manufacturing processes: casting and molding, separating, hot and cold forming, conditioning, assembling, and finishing.

Lecture: 3 hours – Lab: 2 hours

Lab fee: \$5.00

MECH 112 Computer Applications in Manufacturing (A, W, SP, SU) 3 credits

An introductory level computer course for Engineering Technology students. The course introduces computer technology critical to the subsequent success in studies of CAD, CAM, Numerical Control Machining and Computer Programming for Technicians. Students will complete assignments in Microsoft Office as well as cover DOS commands and applications, Windows, the Web and the basic hardware of the computer.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$10.00

MECH 120 Mechanical Drafting I (W, SU) 3 credits

This course is an introductory drafting and blueprint reading course that teaches students how to draw and interpret orthographic and isometric views of various objects and components. Dimensioning, fasteners, section views, assembly and sub-assembly drawings, and Bills of Material are examined in-depth. Emphasis is placed on interpretation of drawings as well as being able to do simple manual construction of views.

Lecture: 1 hour – Lab: 5 hours

Lab fee: \$10.00

MECH 130 Statics (A, SP) 3 credits

This course deals with the principles of trusses, frames, machines and machine components. The course will offer the student experience in dealing with coplanar load systems that are concurrent, parallel and noncoplanar.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: PHYS 181

Lab fee: \$15.00

MECH 131 Hydraulics (W, SP, SU) 3 credits

This is a course designed to instruct students in the basics of fluid flow and power transmission in hydraulically controlled machines. The principles of system design and practical uses of hydraulic systems for industrial, agricultural, and off-road applications are emphasized. Hands-on laboratory experiences are used to demonstrate basic operating principles including piping, pumps, cylinders, and motors.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$10.00

MECH 240 Machine Tools (A, W, SP, SU) 4 credits

This course features hands-on operation of mills, lathes, shapers, and grinders in addition to instruction in safety practices and related theory needed for operating these machines. Additional instruction will be given on cutting tool materials and geometry, feeds and speeds, and associated bench practices.

Lecture: 2 hours – Lab: 6 hours

Lab fee: \$30.00

MECH 242 Strength of Materials (W, SU) 3 credits

This course is a study of the application of external loads to rigid bodies and the analysis of the resulting stresses produced within those bodies. Study will be devoted to thermal expansion, bolted and welded joints, thin walled pressure vessels, beam stresses and deflection, beam design, column stresses, and column design.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: MECH 130

Lab fee: \$15.00

MECH 243 Robotics (A, SU) 3 credits

This course presents robotic operations and system configurations. Students are required to flowchart, code, compile, and debug programs using the Fanuc Karel programming language. Hands on experience with robotic systems is gained through teaching and executing the programs on an articulated 6 axis Fanuc S-6 robot.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: MECH 112

Lab fee: \$10.00

MECH 244 Statistical Process Control (W, SU) 3 credits

This course provides a broad overview of statistical process control practices commonly found in business and industry. This course includes presentation of the philosophy and practices of modern quality control principles, basic probability, control chart applications, acceptance sampling, frequency distributions, and process capability studies.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: Placement into MATH 103 or higher

MECH 250 Materials Science (A, SP) 3 credits
This is a course that will acquaint the engineering technician with the nature, properties, performance, characteristics and practical uses of various engineering materials. Materials such as ferrous and nonferrous metals as well as plastics, and selected organic materials will be covered. Non-destructive and destructive testing practices commonly found in industry today will be presented.
Lecture: 2 hours – Lab: 3 hours
Lab fee: \$15.00

MECH 251 Computer Aided Drafting I (A, SP) 3 credits
Introduces students to the basic terminology and fundamental concepts of computer aided drafting. Commands and functions presented are applicable to other CAD systems. Students apply this knowledge to generate orthographic and other two-dimensional mechanical drawings using AutoCAD software.
Lecture: 1 hour – Lab: 5 hours
Prerequisites: MECH 112 and MECH 120
Lab fee: \$20.00

MECH 252 Computer Programming for Technicians (W, SU) 3 credits
A course designed to instruct students in the use of QBasic in solving engineering problems. Students will design, flowchart, code, compile, and debug programs in this course. Hands-on experience is gained through interfacing digital I/O boards to QBasic.
Lecture: 1 hour – Lab: 5 hours
Prerequisites: MECH 112 and placement into MATH 103 or higher
Lab fee: \$10.00

MECH 253 Numerical Control (W) 3 credits
This course is designed for the beginning student and covers manual computer numerical control programming. Each student will prepare numerical control programs in both absolute and incremental positioning systems using standard industrial G and M codes. Students will program for state-of-the-art computerized numerical control equipment including mills and lathes. Each student will prepare and debug programs and setup and operate computer numerical controlled equipment in the lab.
Lecture: 1 hour - Lab: 5 hours
Prerequisites: MATH 112 and MECH 240
Lab fee: \$25.00

MECH 260 Basic Mechanisms (SP, SU) 4 credits
A graphical and mathematical study of the displacement, velocity, and acceleration of typical industrial mechanisms such as linkages, cams, and gears. Additional topics such as bearings and lubrication are also discussed.
Lecture: 2 hours – Lab: 4 hours
Prerequisite: MECH 120
Lab fee: \$6.00

MECH 261 Machine Design (SP, SU) 4 credits
This course is designed as a capstone experience for Mechanical Engineering Technology students. Students are required to demonstrate their ability to solve engineering problems using skills and knowledge gained through their course work. The class, as a team, will participate in designing and prototyping a machine or mechanism related to the field.
Lecture: 2 hours – Lab: 6 hours
Prerequisites: MECH 131, MECH 242 and EET 102
Lab fee: \$25.00

MECH 262 Computer Aided Drafting II (W, SU) 3 credits
This course is an extension of MECH 251. Course includes the study of practical applications of computer graphics with isometric and three dimensional drawings including wire-frame and solid modeling techniques to produce mechanical and production type drawings using AutoCAD software.

Lecture: 1 hour – Lab: 5 hours
Prerequisite: MECH 251
Lab fee: \$20.00

MECH 263 Computer Aided Manufacturing (SP) 4 credits
This course provides the manual numerical control programmer with an understanding of computer aided manufacturing including instruction in Feature-Cam computer aided manufacturing language
Lecture: 2 hours – Lab: 6 hours
Prerequisites: MECH 251 and MECH 253
Lab fee: \$30.00

MECH 264 Computer Aided Drafting III (AU, SP) 3 credits
An advanced course in 3D design and production oriented information. Students will create production drawings and documentation required to take a product from concept to design, sales, prototyping, production, and final assembly. Students will be utilizing AutoCAD 2000, Mechanical Desktop, and additional software operating in conjunction with AutoCAD.
Lecture: 1 hour– Lab: 5 hours
Prerequisite: MECH 262
Lab fee: \$20.00

Medical Assisting (MAT)

MAT 100 Introduction to Medical Assisting (A) 3 credits
This course provides an overview of the medical assisting profession. Emphasis is placed on professionalism, communication, medical specialties, and medical law and ethics. The students will be evaluated through essay writings on the topics covered. Discussion of the Standard Precautions and compliance with federal regulatory agencies is included. The importance of professional organizations at the national, state and local levels is examined as well as the credentialing of the medical assistant.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Acceptance into the program

MAT 111 Clinical Procedures–Lecture (A) 3 credits
This course introduces the student to the entry-level skills typically performed by the medical assistant in the clinical area of the medical office. Competency-based skills are instructed through theoretical presentations and will include infection control, sanitization, sterilization using the autoclave, hand-washing, measuring and recording vital signs, measuring height and weight, setting up the physical examination tray, positioning patients and assisting the physician in examinations. The guidelines for OSHA compliance are discussed.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Acceptance into the program

MAT 113 Clinical Procedures–Lab (A) 2 credits
This course will demonstrate the entry-level skills and allow the students to perform them hands-on to a competency level. The students will be expected to explain the theory and demonstrate the practical aspects of the clinical skills following a check-off format outlined by the instructor.
Lecture: 0 hours – Lab: 4 hours
Prerequisite: Acceptance into the program
Lab Fee: \$40.00

MAT 121 Advanced Medical Assisting (W) 5 credits
This course will instruct the medical assisting student in the skills beyond the basic entry-level. The advanced skills will include electrocardiography, minor surgery in the medical office, rehabilitation and physical therapy, radiology in the medical office, nutrition and diet therapy and the importance of accurate patient education. The student will explain and

demonstrate the practical aspects of the advanced skills following a check off format outlined by the instructor. Diseases, medical conditions and illnesses treated in the medical office by the various medical specialties will be studied.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: MAT 111

Lab fee: \$10.00

MAT 122 Advanced Office Procedures–Lecture (SP) 2 credits

This course will instruct the student on the administrative skills expected of the entry-level medical assistant through theoretical presentations. Topics to be covered and demonstrated to competency-level are communications, computer concepts, medical records management, screening and processing mail, scheduling and monitoring appointments, office inventory and supplies, operating office equipment, telephone technique and managing practice finances. Application of ICD (diagnosis) and CPT (procedural) coding and insurance claim submission will be included. Discussion and application of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) will be included as well as the importance of patient confidentiality.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: MAT 236, MAT 237

MAT 123 Advanced Office Procedures–Lab (SP) 1 credit

This course introduces the student to advanced aspects of the medical office through practical presentations. Topics include communications, computer concepts, medical records management, screening and processing mail, scheduling and monitoring appointments, operating office equipment and managing practice finances.

Lecture: 0 hours – Lab: 3 hours

Prerequisites: MAT 236, MAT 237

Lab fee: \$7.50

MAT 230 Pharmacology (SP) 4 credits

This course introduces the pharmacology of commonly prescribed drugs in the medical office. The lecture portion allows the student to learn drug laws, brand and generic drug names, prescription abbreviations, prescription format, drug uses and body reactions. The laboratory section will include the demonstration, technique and theory of administration of medications in the medical office setting; included will be intradermal, subcutaneous, and intramuscular routes as well as oral, topical, sublingual, vaginal and rectal administration. The theory and principal of IV medication therapy is discussed. The accuracy of recording medications in the medical record is emphasized. The student will be expected to perform to competency level the pharmacological skills in check-off format outlined by the instructor.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: MATH 100, MAT 121

MAT 236 Computer Application for the Medical Office–Lecture (SP) 1 credit

This course introduces the medical office computer package to the student. The theory of the utilization of a medical office computer package is demonstrated and includes creating a physician data base, preparing patient demographics and daily appointment scheduling as well as preparing daily, monthly and yearly billing cycles. A complete review of coding diagnosis and procedures and insurance claim submissions is included. Internet research of physician and medical practices Web sites is demonstrated.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: MAT 122,

Corequisites: MAT 240, MAT 230

MAT 237 Computer Application for the Medical Office Laboratory (SP) 3 credits

This course allows the student to practice the principals of the medical office computer package through hands-on production of office simulations discussed in the lecture portion. The student will be expected to

prepare a portfolio of the medical office package to competency level in check-off format as directed by the instructor.

Lecture: 0 hour – Lab: 6 hours

Prerequisite: MAT 123

Corequisites: MAT 240, MAT 230

Lab Fee: \$10.00

MAT 240 Physician's Office Laboratory (SP) 5 credits

This course is designed to provide the student with an overview of the procedures utilized to collect and process specimens in a physician's office setting. Emphasis is placed on methods of collections, processing of specimens and quality control. Additionally, the student is introduced to the microscope, the techniques of capillary puncture and venipuncture (vacutainer method), urinalysis, blood typing, microbiology procedures and understanding the normal ranges and the various laboratory reports.

Lecture: 3 hours - Lab: 4 hours

Prerequisite: MAT 121

Lab fee: \$75.00

MAT 260 Ethical and Professional Principles in the Medical Office (SU,-DL) 2 credits

An examination of the medical ethical, legal and bioethical issues in today's medical office is studied. The course will focus on legal/ethical aspects of medicine. Additional focus will be placed on current legislative statutes that affect the practicing medical assistant.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: MAT 122/123

Corequisite: MAT 290/296

MAT 290 Practicum (SU) 3 credits

Practical experience in a physician's office combining the administrative, clinical and laboratory skills of patient care under the supervision of a licensed physician or a certified medical assistant. Students will be placed in various health care facilities and will serve 160 *unpaid* externship hours.

Lecture: 0 hours – Lab: 16 hours

Prerequisites: MAT 122, MAT 123, MAT 230, MAT 240

Corequisite: MAT 296/260

Lab fee: \$50.00

MAT 296 Seminar (SU,-DL) 1 credit

Group discussion of topics related to practicum experiences as well as current trends and topics in the medical assisting profession. Students will also be responsible for projects and simulations of daily medical office activities. *The student will also present a professional portfolio of individual competency check-off sheets and completed projects.*

Lecture: 1 hours – Lab: 0 hours

Prerequisites: MAT 122, MAT 123, MAT 236, MAT 237, MAT 230, MAT 240

Corequisite: MAT 290/260

Medical Laboratory Technology (MLT)

MLT 100 Introduction to Health Care (A, W, SP, SU,-DL) 3 credits

This course provides a general introduction to health care in the U.S., covering topics such as the history of Western medicine, legal and ethical issues, alternative medicine, safety issues, and the evolution of hospitals, medical education, and insurance. The course is taught through a combination of in-class and online materials and will provide students in health-related fields with the background necessary to pursue further studies.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Placement into ENGL 100

Lab fee: \$15.00

MLT 120 Role and Responsibility of the MLT (SU, DL) 1 credit

This course provides an in-depth examination of the role and responsibilities of the MLT as an important professional in the delivery of quality health care. Discussions will include such topics as professionalism, the general organization and operational activities of a clinical laboratory, and career opportunities for MLT graduates. Students will be exposed to actual clinical settings and meet with practicing laboratory personnel. In addition, students will be introduced to specimen collection and processing techniques, quality assurance, and the application of laboratory math and statistics.

Lecture: 1 hour

Prerequisites: MLT 141, MLT 142

Corequisite: MLT 121

MLT 121 Role and Responsibility of the MLT Lab (SU) 1 credit

This course provides a lab component to complement MLT 120. Students will be introduced to basic laboratory equipment, specimen collection and transport procedures, and the principles and practices of phlebotomy.

Lab: 2 hours

Prerequisites: MLT 141, MLT 142

Corequisite: MLT 120

MLT 130 Immunology (SU,-DL) 3 credits

This course covers the immune system, the nature of immune responses, and the application of immunological reactions to a variety of laboratory procedures. Also included are discussions of the etiology and diagnosis of immunologically mediated diseases.

Lecture: 3 hours

Prerequisites: MLT 141, MLT 142

Corequisite: MLT 131

MLT 131 Immunology Lab (SU) 2 credits

This course provides a lab component to complement MLT 130. Emphasis is placed on commonly performed serological tests. Upon completion, students should be able to demonstrate theoretical comprehension and application in performing and interpreting routine immunologic and serodiagnostic procedures.

Lab: 4 hours

Prerequisite: MLT 141, MLT 142

Corequisite: MLT 130

Lab fee: \$175.00

MLT 141 Hematology I (SP,-DL) 3 credits

This course focuses on the origins, morphology, and function of blood cells. The theory and technology used in analyzing blood cells as well as the laboratory evaluation of hematologic disorders will be discussed. Upon completion, students should be able to demonstrate theoretical comprehension of hematology.

Lecture: 3 hours

Prerequisite: Acceptance into the program

Corequisite: MLT 142

MLT 142 Hematology Lab (SP) 3 credits

This course provides a lab component to complement MLT 141. Emphasis is placed on laboratory experiences that enhance materials presented in MLT 141. Upon completion, students should be able to perform routine hematology procedures and correlate laboratory findings with disorders.

Lab: 9 hours

Prerequisite: Admission to program

Corequisite: MLT 141

Lab fee: \$175.00

MLT 180 Special Topics in Medical Laboratory (On Demand) 1 credit

Students work independently on a research project related to the field of clinical laboratory science and present their findings.

Lecture: 1 hour

Prerequisite: Permission of coordinator

MLT 181 Special Topics in Medical Laboratory (On Demand)

2 credits

Students work independently on a research project related to the field of clinical laboratory science and present their findings.

Lecture: 2 hours

Prerequisite: Permission of coordinator

MLT 182 Special Topics in Medical Laboratory (On Demand)

3 credits

Students work independently on a research project related to the field of clinical laboratory science and present their findings.

Lecture: 3 hours

Prerequisite: Permission of coordinator

MLT 220 Immunohematology (A, SP,-DL)

4 credits

This course is designed to prepare students to perform, according to American Association of Blood Banks (AABB) standards, the routine serological procedures used in any transfusion service or blood bank. Stress is placed on the performance of pretransfusion testing and the recognition of the presence of serological incompatibilities in a patient's specimen. Students will be introduced to the techniques used in the resolution of the most commonly encountered serological difficulties. Class discussions will also include donor blood collection and processing for component therapy, blood transfusion practices, adverse affects of blood transfusion, investigation of transfusion reactions, and fetal-maternal blood incompatibilities.

Lecture: 4 hours

Prerequisites: MLT 130, MLT 131

Corequisite: MLT 223

MLT 223 Immunohematology Lab (A, SP)

3 credits

This course provides a lab component to complement MLT 220. Emphasis is placed on laboratory experiences that enhance materials presented in MLT 220. Upon completion, students should be able to perform and interpret routine pretransfusion procedures and recognize common problems.

Lab: 9 hours

Prerequisites: MLT 130, MLT 131

Corequisite: MLT 220

Lab fee: \$250.00

MLT 240 Hematology II (W, SU,-DL)

2 credits

This course builds on the routine Hematology procedures covered in Hematology I. Blood smears are prepared and studied for the identification of blood cells that aid in the diagnosis of anemias, leukemias, hemoglobinopathies, and other disease states. Also included is the study of coagulation and the routine procedures used to evaluate hemostasis. Upon completion of this course, the student will be able to perform routine hematology procedures during clinical experience.

Lecture: 2 hours

Prerequisites: MLT 141, MLT 142

Corequisite: MLT 245

MLT 242 Body Fluids (W, SU,-DL)

2 credits

The course introduces the physical, chemical, and microscopic examination and interpretation of urine and other body fluids in normal and abnormal states, examination and interpretation.

Lecture: 2 hours

Corequisite: MLT 243

MLT 243 Body Fluids Lab (W, SU)

2 credits

This course provides a laboratory component to complement MLT 242. Emphasis is placed on laboratory experiences that enhance materials presented in MLT 242. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting urinalysis and other body fluid tests.

Lab: 4 hours

Corequisite: MLT 242
Lab Fee: \$100.00

MLT 244 Medical Laboratory Case Studies (W, SU,–DL) 2 credits
This capstone course provides a cumulative review of clinical laboratory procedures and theoretical concepts from all phases of laboratory testing. Emphasis is placed on recall and application of theory, correlation, and evaluation of all areas of clinical laboratory science. Upon completion, students should be prepared for national certification examinations and for their clinical practicum.

Lecture: 1 hour – Lab: 3 hours
Prerequisite: All technical courses

MLT 245 Hematology II Lab (W, SU) 2 credits
This course provides a lab component to complement MLT 240. Emphasis is placed on laboratory experiences that enhance materials presented in MLT 240. Upon completion, students should be able to perform and interpret routine hematology procedures and recognize common problems and abnormal results.

Lab: 4 hours
Prerequisites: MLT 141, MLT 142
Corequisite: MLT 240
Lab fee: \$150.00

MLT 250 Clinical Microbiology (W, SU, DL) 4 credits
This course provides a comprehensive survey of clinical microbiology, including mycology and parasitology. Emphasis is placed on the identification of pathogenic organisms covering both routine and special areas of clinical microbiology.

Lecture: 4 hours
Prerequisite: BIO 115
Corequisite: MLT 251

MLT 251 Clinical Microbiology Lab (W, SU) 4 credits
This course provides a laboratory component to complement MLT 250. Emphasis is placed on methods used to isolate and identify commonly encountered pathogens from clinical specimens. Upon completion, students should be able to demonstrate theoretical comprehension in performing and interpreting routine clinical microbiology procedures.

Lab: 12 hours
Prerequisite: BIO 115
Corequisite: MLT 250
Lab fee: \$80.00

MLT 260 Clinical Chemistry (A, SP, DL) 3 credits
This course introduces the application of biochemistry to laboratory medicine and the understanding of the human in health and disease. Analytical procedures utilized to determine chemical constituents in blood, urine and other body fluids will be presented. The chemical principles of the methods will be discussed as well as the correlation of test results as indicators of presence or absence of disease.

Lecture: 3 hours
Prerequisite: CHEM 113 or CHEM 111

MLT 261 Clinical Chemistry Lab (A, SP) 3 credits
This course provides a laboratory component to complement MLT 260. Emphasis is placed on laboratory experiences that enhance materials presented in MLT 260. Upon completion, students should be able to demonstrate theoretical comprehension of clinical chemistry, perform diagnostic techniques, evaluate quality control, and correlate laboratory findings with disorders.

Lab: 9 hours
Prerequisite: CHEM 113 or CHEM 111
Corequisite: MLT 260
Lab fee: \$80.00

MLT 270 Clinical Practicum (A, W, SP, SU) 5 credits
This course provides students with entry-level clinical laboratory ex-

perience in a supervised laboratory setting. Students will be placed in one of several clinical affiliates within an approximate 60 mile radius of Columbus. Students will be required to provide their own transportation. Upon completion, students should be able to demonstrate competency in career entry-level areas.

Lecture: 0 hours – Lab: 35 hours
Prerequisite: All technical courses
Corequisite: MLT 271
Lab fee: \$45.00

MLT 271 Clinical Seminar (A, SP) 2 credits
This course surveys professional issues in preparation for career entry. Students share selected case studies and other problem solving experiences they have encountered during their practicum. In addition, guest speakers are provided to prepare students for credentialing examinations, postgraduate studies, employment opportunities, and to introduce the latest technological advances in the clinical laboratory science field.

Lecture: 2 hours – Lab: 0 hours
Corequisite: MLT 270

Mental Health / Chemical Dependency /Mental Retardation (MHCR)

MHCR 111 Introduction to Mental Health (A, W, SP, SU) 4 credits
This entry-level course provides the student with a comprehensive overview of the mental health field as it relates to historical and contemporary issues impacting the mental health field, as well as service delivery components and barriers. The student acquires knowledge of clinically based mental health knowledge and skills needed to formulate assessments.

This course must be completed with a “C” or better.
Lecture: 4 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101 or 111, placement out of DEV 044 and 031
Lab fee: \$ 12.00

MHCR 112 Introduction Mental Retardation/Developmental Disabilities (A, W, SP, SU) 3 credits
This entry-level course provides the student with an overview of the mental retardation/developmental disability field as it relates to contemporary and historical issues impacting persons with disabilities and the service delivery system. Students will gain knowledge of definitions, causes and characteristics of a variety of developmental disabilities as well as services available to individuals with developmental disabilities. Principles of self-determination, behavior supports and advocacy will be discussed.

This course must be completed with a “C” or better.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101 or 111, placement out of DEV 044 and 031
Lab fee: \$ 12.00

MHCR 114 Introduction to Chemical Dependency (A, W, SP, SU) 4 credits
This entry-level course provides the student with an overview of chemical dependency. Historical and cultural influences and models utilized to understand substance abuse and dependency are discussed. The ASAM/NCADD definition and the DSM-IV criteria of substance dependence are explored. Common drugs of abuse and their impact on the individual, family and society are presented. Students explore community resources available to persons with chemical dependency and their families. This course must be completed with a “C” or better.

Lecture: 4 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101 or 111, placement out of DEV 044 and 031
Lab fee: \$12.00

MHCR 115 Introduction to Counseling (A, W, SP, SU) 4 credits

This introductory course focuses on the development of basic interviewing, rapport building and active listening skills for the beginning student. The student gains a beginning understanding of the process and principles in establishing effective helping relationships using attending behaviors, effective questioning, empathy and self-awareness. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101 or 111, placement out of DEV 044 and 031

Lab fee: \$12.00

MHCR 117 Introduction to Documentation Skills (A, W, SP, SU) 2 credits

The emphasis in this introductory course is on the use of behavioral writing to document services delivered to clients. Students learn beginning skills needed to maintain records, including writing progress notes. This course must be completed with a "C" or better.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101 or 111, placement out of DEV 044 and 031

Lab fee: \$ 15.00

MHCR 135 Intervention Strategies (A, W, SP, SU) 3 credits

The emphasis in this core course is on understanding client behavior, assessing readiness and stage of change, and developing positive intervention strategies. Behavioral principles are utilized. Crisis intervention, anger management and therapeutic assault prevention are explored. Application of skills is utilized with clients with mental health, chemical dependency and/or mental retardation problems. This course must be completed with a "C" or better.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Admission to the program

Corequisite: MHCR 191

Lab fee: \$16.00

MHCR 150 Pharmacology in Human Services (A, W, SP, SU) 2 credits

This is a required course in all three tracks in the MH/CD/MR program. This course examines the composition, uses and effects of various psychoactive and psychotropic drugs. Commonly used psychotropic medications, the psychiatric conditions for which they are prescribed, and frequently experienced side effects are discussed. An overview of the central nervous system and drug/neurotransmitter interactions is also covered. This course must be completed with a "C" or better.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: Admission to the program

Lab fee: \$12.00

MHCR 191A Fundamentals in Human Service Practice – Helping Process (A, W, SP, SU) 4 credits

Emphasis in this core course is on understanding and applying the helping process. Students learn to apply data collection, data assessment, action planning, action/implementation and evaluation skills. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: Admission to the program, MHCR 111, 112, 114, 115, 117, PSY 100, ENGL 101

Lab fee: \$12.00

MHCR 191B Fundamentals in Human Service Practice – Practicum (A, W, SP, SU) 4 credits

Emphasis in this core course is on observing and participating in the delivery of services to clients served by an agency. The student practices beginning helping skills including data collection, assessment and action planning under the supervision of an agency professional. The student processes practicum experiences in a weekly seminar. This course must be completed with a "C" or better.

Lecture: 2 hours – Lab: 14 hours

Prerequisites: Admission to the program, MHCR 111, 112, 114, 115, 117, PSY 100, ENGL 101

Lab fee: \$38.00

MHCR 230 Supervision & Ethics In Chemical Dependency (On Demand) 2 credits

This course familiarizes the student with clinical supervision in the field of chemical dependency and looks at ethical standards and issues in substance abuse counseling and prevention. This course must be completed with a "C" or better.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$5.00

MCHR 230A Supervision in Chemical Dependency Counseling (On Demand) 1 credit

This course is a modularized component of 230 which will familiarize the student with clinical supervision in the field of chemical dependency and issues in substance abuse counseling and prevention. This course must be completed with a "C" or better.

Lecture: 1 hour – Lab: 0 hours

Lab fee: \$5.00

MCHR 230B Ethics in Chemical Dependency Counseling (On Demand) 1 credit

This course is a modularized component of 230 which will familiarize the student with ethical standards and issues in substance abuse counseling and prevention. This course must be completed with a "C" or better.

Lecture: 1 hour – Lab: 0 hours

Lab fee: \$2.00

MCHR 231 Ethics in Substance Abuse Prevention (On Demand) 1 credit

This course familiarizes the student with ethical issues in the field of substance abuse prevention. This course must be completed with a "C" or better.

Lecture: 1 hour – Lab: 0 hours

Lab fee: \$2.00

MCHR 234 Therapeutic Laughter (On Demand) 3 credits

This course familiarizes the student with the therapeutic aspects of humor and the skills and knowledge necessary to become a Certified Laughter Leader. Leaders are able to facilitate social and therapeutic Laughter Clubs. This course must be completed with a "C" or better.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$8.00

MCHR 235 Diagnosis & Treatment for Chemical Dependency Counselors (On Demand) 4 credits

This course familiarizes the student with DSM-IV with the emphasis on substance related disorders. Other common mental disorders are explored. Treatment for substance related and mental disorders are discussed.

This course must be completed with a C or better.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$8.00

MHCR 236 Foundations in Prevention (On Demand) 4 credits

This course familiarizes the student with the historical perspectives, theoretical approaches, current program models and research in ATOD. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$8.00

Prerequisite: MHCR 114

Corequisite: MCHR 191

MHCR 237 Program Planning and Evaluation (On Demand) 3 credits

This course focuses on the role of the community and leaders in the com-

munity in the development and Implementation of prevention services. Methods for evaluating program effectiveness, impact and outcomes of prevention services are explored. This course must be completed with a "C" or better.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: MHCR 236

Lab fees: \$8.00

MHCR 239 Advanced Prevention Practices 3 credits

This practicum course allows students to become involved in the community to access develop implement and evaluate prevention services. This course must be completed with a "C" or better.

Lecture: 2 hours – Lab: 0 hours

Practicum: 10 hours

Prerequisite: MCHR 237

Lab fee: \$35.00

MHCR 241 Counseling Skills (A, W) 4 credits

This core course focuses on theoretical and practical aspects of effective helping through the counseling relationship with clients who have MH/CD and/or MR issues. Skills which form the foundation of effective communication, using a microtraining model, are emphasized. Critical thought and creativity is stressed. Course emphasizes practicing skills in small groups, and in role play/simulations. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: MHCR 191A and B

Lab fee: \$18.00

MHCR 245 Chemical Dependency I (A, W) 4 credits

This course is offered as part of the CD track only. Course content includes exploration of various approaches and philosophies to the treatment of addictions, recognition of signs and symptoms of substance dependence and assessing client's stage of change and the appropriate level of care for treatment. Issues and treatment for families and significant others are reviewed. Students complete a bio-psycho-social assessment, diagnostic summary and didactic presentation. The 12 Core Functions of a substance abuse counselor are interwoven throughout the quarter. Students participate in, explore and evaluate community support groups. Legal and ethical issues in the field of chemical dependency counseling are explored. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: MHCR 191A and B

Corequisites: MHCR 241 and MHCR 293

Lab fee: \$18.00

MHCR 247 Teaching and Supporting Strategies (A, W) 4 credits

This course provides a comprehensive overview of the principles and techniques for teaching and supporting people with diverse needs. Topics covered include habilitation/rehabilitation programming, self-determination, person centered planning, teaching and learning styles, community connecting, task and process analysis, development of teaching plans and supported employment. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: MHCR 191A and B

Corequisites: MHCR 241 and 291

Lab fee: \$18.00

MHCR 251 Social Policy (W, SP) 4 credits

This course examines social welfare policies/programs at national, state, and local levels in fields of MH/CD/MR. The student uses an ecological model for social change to collect, synthesize and evaluate data on a variety of social problems. Throughout the course the student documents analysis of visits to agencies and organizations. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: MHCR 245/293 or MHCR 247/291

Lab fee: \$18.00

MHCR 253 Therapeutic Group Work Skills (W, SP) 4 credits

This course, offered as a part of all three tracks in the program, is focused on knowledge and experiential learning using the group as the unit of attention. Course content includes process, stages of development, leadership skills, therapeutic factors and problematic issues for groups of clients who are mentally ill, mentally retarded, chemically dependent, or who have co-occurring disorders. The student participates as a member in a peer group to complement classroom theoretical constructs. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: MHCR 241 and MHCR 247/291 or MHCR 245/293

Corequisite: MHCR 295

Lab fee: \$20.00

MHCR 258 Service Coordination/Case Management (SP, SU) 4 credits

This course provides the human service student with a comprehensive overview and analysis of a service coordination/case management system. An in-depth exposure to newly defined skills, treatment approaches and contemporary issues impacting the service coordination/case management delivery field. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: MHCR 253 and 295

Corequisite: MHCR 298

Lab fee: \$18.00

MHCR 265 Chemical Dependency II (SP, SU) 4 credits

This is an advanced course offered as part of the Chemical Dependency track only. This course focuses on working with clients with co-occurring disorders and relapse prevention. Students assess client resistance, identify stages of change, and practice appropriate motivational interviewing techniques. Students develop a relapse prevention plan/treatment plan and develop a discharge plan utilizing a variety of community support groups and resources. Legal and ethical issues, including duty to warn and working with impaired professionals, are explored. This course must be completed with a "C" or better.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: MHCR 253 and 295

Corequisite: MHCR 296

Lab fee: \$18.00

MHCR 266 Treatment in the Criminal Justice System (On Demand) 4 credits

This course explores substance abuse and mental health treatment in the criminal justice system. Various treatment modalities will be discussed with particular focus on therapeutic communities. Students gain awareness of social, political and institutional issues that influence design, policy and implementation of institutional treatment programming.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$10.00

MHCR 270 Special Topics in Chemical Dependency Counseling (On Demand) 2 credits

This course familiarizes the student with the cultural perspectives of specific client populations as it relates to substance abuse/dependency assessment and treatment of individuals and families. The topics include: Native Americans, Domestic Violence Survivors, Sexual Abuse Perpetrators, Pregnant Women, Siblings of Substance Abusing Adolescents, Latinos, Gangs, Older Adults and Parents and Families. This course must be completed with a "C" or better.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$20.00

MCHR 275 Principles of Team Process (On Demand) 3 credits

This is an advanced course which provides the student with a theoretical and practical foundation for functioning as a team member in a human service agency. This course must be completed with a "C" or better.

Lecture: 3 hours – Lab: 0 hours
Lab fee: \$10.00

MHCR 280 Special Topics in Chemical Dependency (On Demand)
2 credits

This course familiarizes the student with the cultural perspectives of specific client populations as it relates to substance abuse/dependency assessment and treatment of individuals and families. The topics include: African-American persons; the Appalachian Community; people living with HIV-AIDS; adolescents; criminal offender population; gay, lesbian, bisexual and transgendered persons; homeless individuals; persons with co-occurring disorders. This course must be completed with a “C” or better.

Lecture 2 hours – Lab 0 hours
Lab fee: \$20.00

MHCR 274 and MHCR 284 Special Studies in MH/CD/MR (On Demand)
4 credits

These courses are designed to meet specific needs of students who wish to pursue in-depth training in the MH/CD/MR field. Typical subject areas include theory and skills in helping individuals who are chemically dependent, severely mentally disabled, dually-multi diagnosed, or persons with mental retardation/developmental disabilities. Instructional methods may include clinical experience, seminar format, field placement, lecture, research, videotape and role play. Students enroll in this course with permission of faculty or clinical coordinator. This course must be completed with a “C” or better.

Lecture 4 hours – Lab: 0 hours
Lab fee: \$20.00

MHCR 290 Special Topics in Prevention
2 credits

This course familiarizes the student with various aspects of prevention. Evidence-based practice standards will be utilized including risk and protection measures. The topics will rotate and include the prevention of various health related issues, violence, crime, delinquency, teen pregnancy, mental health issues, sexually transmitted diseases and other emerging issues.

Lecture: 2 hours – Lab: 0 hours
Lab fee: \$4.00

MHCR 291 Practicum in Teaching and Supporting Strategies (A, W)
4 credits

This is a clinical experience for the student specializing in the Mental Health and Mental Retardation tracks which takes place in a community agency. The student practices the skills needed to teach and support people in vocational or community settings with an emphasis on habilitation/rehabilitation programming, self-determination, person centered planning, community connecting, teaching plans and job coaching. The student is expected to assume the role of service provider and is responsible for professional conduct and appropriate work habits. The student processes practicum experiences in a weekly seminar. This course must be completed with a “C” or better.

Lecture: 2 hours – Lab: 14 hours
Prerequisites: MHCR 191A and B
Corequisite: MHCR 247
Lab fee: \$45.00

MHCR 293 Practicum in Chemical Dependency I (A, W) 4 credits

This is a required clinical experience for students in the Chemical Dependency track. The student is placed in an agency that provides chemical dependency treatment services. Students begin to participate in services that relate to the 12 core functions of a substance abuse counselor. Focus is on assessment, symptom identification and engaging clients in the treatment process. The student assumes the role of service provider demonstrating professional conduct and appropriate work habits. The student processes practicum experiences in a weekly seminar. This course must be completed with a “C” or better.

Lecture: 2 hours – Lab: 14 hours

Prerequisites: MHCR 191A and B
Corequisite: MHCR 245
Lab fee: \$45.00

MHCR 295 Practicum in Therapeutic Group Work (W, SP) 4 credits

This is a clinical experience for the student in all three tracks in the MH/CD/MR program. In a community agency the student leads or co-leads a group using skills learned in the classroom, in addition to maintaining one-on-one contact with an identified agency client. The student assumes the role of service provider, demonstrating professional conduct and appropriate work habits. This course must be completed with a “C” or better.

Lecture: 2 hours – Lab: 14 hours
Prerequisites: MHCR 241 and 247/291 or 245/293
Corequisite: MHCR 253
Lab fee: \$50.00

MHCR 296 Practicum in Chemical Dependency II (SP, SU) 4 credits

This advanced clinical experience is required for the student in the Chemical Dependency track and continues to engage students in the 12 Core Functions of a substance abuse counselor. Emphasis is on co-occurring disorders and relapse prevention utilizing motivational enhancement and stage wise treatment throughout the practicum experience. The student assumes the role of service provider, demonstrating professional conduct and appropriate work habits. The student processes practicum experiences in a weekly seminar. This course must be completed with a “C” or better.

Lecture: 2 hours – Lab: 14 hours
Prerequisite: MHCR 253 and 295
Corequisite: MHCR 265
Lab fee: \$50.00

MHCR 298 Practicum in Service Coordination/Case Management (SP, SU)
4 credits

This is a clinical experience for the Mental Health and Mental Retardation track student. The student practices service coordination and case management skills with emphasis on interdisciplinary treatment planning, assessment writing and the implementation of appropriate referrals. The student assumes the role of service provider and is responsible for professional conduct and acceptable work habits. This course must be completed with a “C” or better.

Prerequisites: MHCR 253 and 295
Corequisite: MHCR 258
Lab fee: \$35.00

MHCR 299 Portfolio Completion Capstone Course in MH/CD/MR (SP, SU)
1 credit

This course will provide the student with the opportunity to assemble, edit, and ready for presentation in portfolio format the collected assignments from each course in the major. Feedback regarding each course is solicited from the student. In addition, the content areas of ethical concerns in human services, effective team participation and avoiding “burnout” are addressed. This course must be completed with a “C” or better.

Lecture: 1 hour – Lab: 0 hours
Corequisite: Fourth and last technical course paired with practicum.
Lab fee: \$40.00

Multi-Competency Health (MULT)

MULT 101 Medical Terminology (A, W, SP, SU, –DL) 2 credits

This introductory online course provides an overview of medical language. Emphasis will be placed on terms that are practical and commonly found in the day-to-day work of all allied health professions. This concise course gives basic principles for understanding the language with an overview

of terms from many areas of medicine.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$5.00

MULT 102 Cardiopulmonary Resuscitation for Healthcare Providers (CPR) (A, W, SP, SU) .5 credit

Cardiopulmonary resuscitation and foreign body airway obstruction removal for adults, pediatrics and infants. This course includes training on the use of bag valve masks, automated external defibrillators (AED) and cricoid pressure. Students completing this course are eligible for American Heart Association (AHA) Healthcare Provider certification. This course follows 2005 Emergency Cardiac Care (ECC) guidelines and is professional level CPR, only students in a pre-health or health program may take this course. This is a one day course held on main campus. Certification is good for 2 years. It may only be repeated with an instructor/coordinator signature. The AHA strongly promotes knowledge and proficiency in CPR and has developed instructional materials for this purpose. Use of these materials in an educational course does not represent course sponsorship by the AHA, and any fees charged for such a course do not represent income to the association.

Lecture: .5 hour – Lab: 0 hours

Prerequisite: Placement above or credit for ENGL 100

Lab fee: \$5.00

MULT 103 Responding to Emergencies (A, W, SP, SU) 2 credits

Requirements for Red Cross Certification including artificial respiration, bleeding control, treatment of shock, and care of fractures are presented. This course includes MULT 102, American Heart Association CPR-Basic Life Support.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$23.00

MULT 104 Adult and Pediatric CPR (for Non-Healthcare Providers) (A, W, SP, SU) .5 credit

Cardiopulmonary resuscitation and foreign body airway obstruction removal for adults, children and infants. This course also includes training on public access and use of automated external defibrillators (AED). Students completing this course are eligible for American Heart Association (AHA) Heartsaver AED CPR certification. This course follows 2005 Emergency Cardiac Care (ECC) guidelines and is designed for the general public. *This course does not fulfill the required CPR certification for healthcare providers.* Not open to students with credit for MULT 102. This may only be repeated with an instructor/coordinator signature. The AHA strongly promotes knowledge and proficiency in CPR and has developed instructional materials for this purpose. Use of these materials in an education course does not represent course sponsorship by the AHA, and any fees charged for such a course do not represent income to the association.

Lecture: .5 hour – Lab: 0 hours

Lab fee: \$5.00

MULT 110 Basic Electrocardiography (EKG) (A, SP) 6 credits

This course is designed to provide basic entry-level skills in cardiovascular technology. The course covers an introduction to health care, anatomy and physiology of the heart, operation of the electrocardiograph and recording of EKGs, cardiac pathology, and basic cardiac rhythm recognition skills. Completion of the course qualifies the student to function as an EKG technician, a skill ordinarily utilized in an acute health care setting or physician's office. This course includes 24 hours of clinical experience.

Lecture: 5 hours – Lab: 2 hours Practicum: 3-8 hour shifts total

Prerequisites: Placement into ENGL 101, completion of a health record.

Lab fee: \$38.00

MULT 114 Phlebotomy Practicum II (A, SP) 1.5 credits

This course is designed to be a continuation of MULT 115 by providing an additional 60 hours clinical phlebotomy experience and requiring an additional 60 successful blood collections. Phlebotomy Practicum II is designed for students who intend to be a professional phlebotomist.

MULT 114 and MULT 115 completes the NAACLS approved program. This course, along with MULT 114, satisfies eligibility requirements to take a national certification exam.

Lecture: 0 hours – Clinical: 60 hours total

Prerequisites: Completed health record, fingerprinting, completion of MULT 115 with a “C” or better

Lab fee: \$10.00

MULT 115 Phlebotomy (W, SU) 4.75 credits

Blood collection by both venipuncture and capillary puncture techniques, using various equipment are performed in class and in the hospital. Professional ethics and liability, composition and appearance of blood, safety, anticoagulants and clinical relevance of laboratory tests are studied. Problems encountered in phlebotomy, in addition to special specimen collection for transfusion services, blood cultures, coagulation tests, timed tests and the nursery are also reviewed. This course includes a 40 hour clinical experience and at least 40 successful blood collections in a health care facility. You must be available for an 8 hour daytime shift one time per week M-F, during the last half of the quarter for the clinical experience.

Lecture: 3 hours – Lab: 3 hours Practicum: 40 hours total

Prerequisites: MULT 101, placement above or credit for ENGL 100; completed health record, fingerprinting for a background check, and drug screening are requirements for the clinical experience portions. (You may not be eligible for this course if you have a positive background check or drug screen.)

Lab fee: \$55.00

MULT 116 Venipuncture for Health Care Providers 2 credits

Basic blood collection techniques using vacuum tubes and syringes will be covered and practiced in a laboratory and clinical setting. Emphasis is on basic skills, safety and infection control. Not open to students who have credit for MULT 114 and MULT 115 This course includes a 30 hour clinical experience and at least 50 successful blood collections in a health care facility.

Lecture: 1 hour – Lab: 1 hour Practicum: 30 practicum hours total

Prerequisites: Completed health record and be enrolled in Medical Laboratory Technology

Lab fee: \$28.00

MULT 127 Patient Care Assistant for the Workforce (A, W, SP, SU) 5 credits

This is a workforce training course for employees of health care systems who have entered into a partnership with CSCC. Students gain knowledge and skills to function as a patient care assistants.

Lecture: 3 hours – Lab: 4 hours

Prerequisite: Employee of health care system with a partnership with CSCC

Lab fee: \$30.00

MULT 128 Introduction to Patient Care Assistant for the Workforce (A, W, SP, SU) 5 credits

This is a workforce training course for employees of health care systems who have entered into a partnership with CSCC. The student learns nurse aide training skills (basic patient care skills such as bathing, feeding, etc.) in order to work with patients prior to taking the Basic PCA/MSP training.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: Employee of health care system having a partnership with CSCC

MULT 135 Basic PCA/MSP Training for the Workforce (A, W, SP, SU) 4 credits

This is a workforce training course for employees of health care facilities that have entered into a partnership with CSCC. In classroom, laboratory and clinical settings, students learn sterile techniques and patient care skills.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: NATP or MULT 128 and employee of health care facility with a partnership with CSCC

MULT 136 Advanced Patient Care Assistant for the Workforce (A, W, SP, SU) 2 credits

This is a workforce training program for employees of health care facilities which have entered into a partnership with CSCC. In classroom, laboratory, and clinical settings, students learn advanced patient care skills such as tracheostomy care.

Lecture: 1 hour – Lab: 2 hour

Prerequisites: MULT 135 and employee of health care facility having a partnership with CSCC

MULT 137 Phlebotomy Training for the Workforce (A, W, SP, SU) 4 credits

This is a workforce training program for employees of health care facilities that have entered into a partnership with CSCC. In classroom, laboratory and clinical settings, students learn the skills of drawing blood.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: MULT 135 or permission of instructor and employee of health care facility having a partnership with CSCC

MULT 138 EKG Training for the Workforce (A, W, SP, SU) 2 credits

This is a workforce training program for employees of health care facilities that have entered into a partnership with CSCC. In classroom, laboratory and clinical settings, students learn the skill of performing electrocardiograms.

Lecture: 1 hours – Lab: 2 hours

Prerequisites: MULT 135 or permission of instructor and employee of facility having a partnership with CSCC

MULT 139 Basic PCA Training for the Workforce (A, W, SP, SU) 4 credits

This is a workforce training program for employees of health care facilities that have entered into a partnership with CSCC. In classroom and laboratory settings, students learn basic patient care skills.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: Employee of facility having a partnership with CSCC

MULT 140 Patient Care Technician Training for the Workforce (A, W, SP, SU) 3 credits

This is a workforce training program for employees of health care facilities which have entered into a partnership with CSCC. In classroom and laboratory settings, students learn sterile technique and advanced patient care skills.

Lecture: 2 hour – Lab: 2 hours

Prerequisites: MULT 139 or permission of instructor and employee of health care facility having a partnership with CSCC

MULT 149: Tissue Identification Clinical (SP) 1 credit

In this course, the student will apply the concepts of tissue identification in an authentic clinical setting, working with tissue specimens.

Practicum: 5 hours

Prerequisites: MATH 100, MULT 101, BIO 161, CHEM 113, placement into ENGL 101. *Acceptance into program is also required.

Corequisites: MULT 150, 151, 152

MULT 150: Histologic Techniques (SP,–DL) 3 credits

This course provides an examination of all of the procedures that take place at the beginning of preparing a tissue sample for examination by the pathologist. These procedures include embedding techniques, tissue fixation, principles of microtomy and tissue processing.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: MATH 100, MULT 101, BIO 161, CHEM 113, Placement into ENGL 101

Corequisites: MULT 149, 151, 152

MULT 151: Histologic Techniques Clinical (SP) 2 credits

In this course, the student will apply the theory of the basic histologic techniques examined in MULT 150 in an authentic clinical setting.

Practicum: 15 hours

Prerequisites: MATH 100, MULT 101, BIO 161, CHEM 113, Placement into ENGL 101

Corequisites: MULT 149, 150, 152

MULT 152 Tissue Identification (SP,–DL) 2 credits

The structure and identification of tissue systems is emphasized at a cellular level. The student will develop skills that will assist them in identification of different tissue sources. Subsequently, the tissue source will be correlated with tissue function.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: MULT 100, MULT 101, BIO 161, CHEM 113

Corequisites: MULT 149, 150, 151

MULT 154 Chemistry of Stains I (SU,–DL) 3 credits

This course addresses the fundamentals and clinical significance of routine and special histological staining.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: MULT 149, MULT 150, MULT 151, MULT 152

Corequisite: MULT 155

MULT 155 Chemistry of Stains I Clinical (SU) 2 credits

In this course, students will apply the concepts from MULT 154 in an authentic clinical setting.

Practicum: 15 hours

Prerequisites: MULT 149, MULT 150, MULT 151, MULT 152

Corequisite: MULT 154

MULT 156 Chemistry of Stains II (AU,–DL) 2 credits

This course is a continuation of MULT 154 and will include special histology staining procedures including immunohistochemistry, and basic and advanced troubleshooting techniques.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: MULT 154, MULT 155

Corequisite: MULT 157

MULT 157 Chemistry of Stains II Clinical (AU) 2 credits

In this course, students will apply the concepts from MULT 156 in an authentic clinical setting.

Practicum: 15 hours

Prerequisites: MULT 154, MULT 155

Corequisite: MULT 156

MULT 171 Current Issues: HIV Infection (A, W, SP, SU) 1 credit

Introductory course covering the psychological, social, legal, and epidemiologic issues surrounding HIV infection. Offered as a term course.

Lecture: 1hour – Lab: 0 hours

Lab fee: \$9.00

MULT 178 Animals and Nature–Therapeutic Programs (SP) 3 credits

The Animal-Assisted Therapy and Education Certificate Program is designed to meet the Delta Society's standards for accreditation. The Delta Society is an international organization devoted to research and service in the area of human-animal relationships and is the leading resource center on the interactions of people, animals and the environment. The program will include the Delta Society's Pet Partners home-study course and its two-day course on temperament testing.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: MULT 179

MULT 179 Companion Animals and Health (W) 2 credits

This course will review the recent scientific evidence which confirms the ancient wisdom that our living environment—our pets, gardens, parks, rural landscapes and wild and domestic animals—have important, positive

effects on health and well-being of humans. Topics to be covered include the cognitive, emotional, behavioral, and physiological effects of contact with animals and nature; biophilia, our natural affinity for life that binds us to all living species; the psychobiology of nurturing; the ecology of pets, gardens and natural places.
Lecture: 2 hours – Lab: 0 hours
Prerequisite: MULT 181

MULT 181 Introduction to the Human-Animal Interaction (A)
2 credits

This course will investigate the origins, nature and application of the human-animal bond. The course content is designed to promote understanding of the mutually nurturing relationship between people and animals and to explore services by animals to aid people with health difficulties and physical and emotional challenges.
Lecture: 2 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$8.00

MULT 270 Human Resource Management for Health Services (–DL)
4 credits

The focus of this course is the application, analysis, synthesis, and evaluation of human resource management principles and practices for health care managers. Practical application to past and current life/work experience is provided and emphasized. Case studies are used as simulations to provide future application in the real work setting.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: ENGL 101, and BMGT 218 or permission of the coordinator
Lab fee: \$5.00

MULT 272 Health Care Resource Management (–DL) 4 credits

This course is designed to provide management approaches to health care resources (budget, equipment, supplies, etc.). It is intended for health care managers with limited financial skills.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: ENGL 101, and BMGT 218 or permission of the coordinator
Lab fee: \$5.00

MULT 274 TQM/UM/Accreditation (–DL) 4 credits

This course prepares health care professionals to apply, analyze, synthesize, and evaluate principles and practices of Total Quality Management (TQM), Utilization Management (UM), and Accreditation. TQM focuses on methods and systems to identify and resolve problems that interfere with optimal care and explore continuous quality improvement processes. UM enlightens health care managers to their essential involvement in the review process and examines the meaning of utilization review to institutional performance. Accreditation process is presented in a practical manner to approach a very complex concern of health care managers. Health care managers will be more knowledgeable of and compliant with external accreditation processes.
Lecture: 4 hours – Lab: 0 hours
Prerequisites: ENGL 101 and BMGT 218 or permission of the coordinator
Lab fee: \$5.00

MULT 276 Legal Aspects and Risk Management (–DL) 3 credits

This course is designed to provide the student with an overview of the legal aspects and risk management of the health care system. It is intended for health care practitioners preparing to enter supervisory positions.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: ENGL 101 and BMGT 218 or permission of the coordinator
Lab fee: \$5.00

MULT 290 Special Topics in Health Care (A, W, SP, SU)
1–5 credits

This is a workforce training course for employees of health care facilities which have entered into a partnership with CSCC. Various current and timely topics will be offered to give students an opportunity to expand their knowledge and/or skill level in a special area of interest.

Lecture: 1-5 hours (maximum of 10) – Lab: 0 hours
Prerequisites: Permission of instructor and employee of facility having a partnership with CSCC

MULT 291 Special Topics in Health Care for the Workforce (A, W, SP, SU)
1-5 credits

This is a workforce training program for employees of health care facilities which have entered into a partnership with CSCC. Students will discuss various current and timely topics related to patient care.
Lecture: 1-5 hours maximum of 10) – Lab: 0 hours
Prerequisite: Permission of instructor and employee of facility having a partnership with CSCC

Music (MUS)

MUS 101 History of Western Music (A, W, SP, SU) 5 credits

A survey of Western music from earliest times to the present including the development of notation in music, the development and limitations of standard instruments, the role of patronage in musical developments, the relationship of changes in music to changes in society, and a consideration of the attributes of “great” music in any time or age. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in History, Humanities and the Arts.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$3.00

MUS 102 Introduction to Vocal Technique (A, W, SP, SU) 1 credit

An introduction to vocal technique intended for nonmusic majors. This class will develop basic skills for both solo and group singing through the use of traditional song materials. Repeatable for 2 total credits.
Lecture: hours – Lab: 2 hours
Lab fee: \$2.00

MUS 103 Vocal Technique II (A, W, SP, SU) 1 credit

Continuation of MUS 102, continued development of skills for solo and group singing through traditional song material. Repeatable for 2 total credits.
Lecture: hours – Lab: 2 hours
Prerequisite: Admission by audition
Lab fee: \$2.00

MUS 110 Basic Keyboard and Music Fundamentals I 2 credits

Basic applied keyboard combined with the development of music reading and basic aural skills. This course is for those without prior musical experience.
Lecture: 1 hours – Lab: 2 hours
Lab fee: \$2.00

MUS 111 Basic Keyboard and Music Fundamentals II 2 credits

Continued development of keyboard technique and basic musical theory.
Lecture: 1 hours – Lab: 2 hours
Prerequisite: MUS 110 or permission of instructor
Lab fee: \$2.00

MUS 120 Introduction to Electronic Music (On Demand) 3 credits

This course will introduce students to the fundamentals of synthesized music. The origin, development, and present day applications of computerized sound manipulations will be studied. Prototypical synthesizing, MIDI sequencing, and digital sampling will be discussed, demonstrated, and used in class. Instruction is through a combination of lecture and hands-on experience.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: MUS 110 or permission of instructor
Lab fee: \$3.00

MUS 121 Fundamentals of Music Theory (On Demand) 5 credits
An introduction to the elements of music for nonmusic majors, including notation and the basic skills necessary for listening and performance. The class is designed to introduce the students to the elements and procedures necessary for the composition and performance of music.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$2.00

MUS 130 Electronic Music Lab (On Demand) 2 credits
A continuation of MUS 120. The emphasis in this course is more on hands-on studio experience. Repeatable up to a total of 6 credits
Lecture: 1 hour – Lab: 2 hours
Lab fee: \$3.00

MUS 135 Electronic Music Ensemble (On Demand) 1 credit
Admission by audition/instructor permission. A select group of musicians rehearsing, arranging, and performing music on electronic instruments. Repeatable for a total of 6 credits.
Lab: 2 hours
Lab fee: \$3.00

MUS 140 World Music (On Demand) 5 credits
A survey of nonwestern musical traditions, including forms of music, instrumental development and function, and the role of music and the musician in society. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in History, Humanities and the Arts.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$2.00

MUS 160 Concert Band (A, W, SP) 1 credit
Admission by audition. Preparation of a variety of wind literature for performance. Prior experience in instrumental music expected. Elective credit for Associate of Arts and Associate of Science degrees. Repeatable for a total of 6 credits.
Lecture: 0 hours – Lab: 2 hours
Lab fee: \$5.00

MUS 165 Small Instrumental Ensemble (A, W, SP) 1 credit
Placement by audition. Specialized ensemble to concentrate on specific instrumental techniques or to explore specialized musical literature. Prior experience in instrumental music expected. Elective credit for Associate of Arts and Associate of Science degree. Repeatable for a total of 6 credits.
Lecture: 0 hours – Lab: 2 hours
Lab fee: \$5.00

MUS 170 Gospel Vocal Ensemble (A, W, SP) 1 credit
Admission by audition. Preparation for concert performance of music primarily from the gospel and African-American vocal/choral traditions. Music reading ability not required. Repeatable for a total of 6 credits.
Lab: 2 hours
Lab fee: \$3.00

MUS 180 Vocal Ensemble (A, W, SP) 1 credit
Admission by audition. Preparation for performance in concert of a variety of music. Music reading ability helpful but not required. It is suggested that a new Ensemble member take MUS 102 concurrently. Repeatable for a total of 6 credits.
Lecture: 0 hours – Lab: 2 hours
Lab fee: \$5.00

MUS 217 Electronic Sound (On Demand) 4 credits
This course is part of the Time Arts curriculum and will explore the history of electronic music as well as introducing to the student the techniques and methods for structuring sound digitally.
Lecture: 2 hours – Lab: 4 hours
Prerequisites: Hum 245 and Art 215
Lab fee: \$4.00

MUS 221 Musicianship I (A) 5 credits
Course covers elements of music and musical notation; analytical concepts and terminology; major and minor scales; fundamentals of harmony and melody as well as development of basic aural skills, and sight singing and dictation. For students intending to major in music or those with strong interest in music.
Lecture: 3 hours – Lab: 4 hours
Prerequisite: MUS 121 or permission of instructor
Lab fee: \$3.00

MUS 222 Musicianship II (W) 5 credits
Principles of diatonic harmony and nonchordal melodic technique, introduction to chord structures and continued development of aural skills.
Lecture: 3 hours – Lab: 4 hours
Prerequisite: MUS 221 or permission of instructor
Lab fee: \$3.00

MUS 223 Musicianship III (SP) 5 credits
Continued study of diatonic modulation and secondary dominants, modal and pentatonic harmonic patterns and pentatonic and blues scales. Continued development of aural skills.
Lecture: 3 hours – Lab: 4 hours
Prerequisite: MUS 222 or permission of instructor
Lab fee: \$3.00

MUS 224 Contemporary and Jazz Theory (On Demand) 5 credits
Chord structures, form, and chord-scale relationships of the jazz idiom will be studied, as will jazz (musical) vocabulary, lead sheets, chord symbols, and the practice of improvisation. Course designed for those intending to major in music or having strong personal interest. Music reading ability assumed.
Lecture: 3 hours – Lab: 4 hours
Prerequisites: Entry into ENGL 101 and either MUS 221 or permission of instructor
Lab fee: \$6.00

MUS 241 Music History I (A) 3 credits
A survey of the development of music from earliest times to the 18th Century. Student ability to read music is assumed.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$2.00

MUS 242 Music History II (W) 3 credits
A survey of music from the rococo through the early romantic (1850) periods. Student ability to read music is assumed.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$2.00

MUS 243 Music History III (SP) 3 credits
A survey of music from the late romantic period to the present. Student ability to read music is assumed.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101
Lab fee: \$2.00

MUS 244 History of Jazz and Popular Music 3 credits
A survey of the origins and development of jazz, the uniquely American musical idiom. 19th century origins of jazz, Dixieland, Chicago sound and

evolution of the 1920s and 1930s big bands, cool jazz, and the influence of jazz on other popular music of the 20th century will be explored through listening to recordings by major innovators and studying the written forms. Music reading ability assumed.

Lecture: 3 hours

Prerequisite: Entry into ENGL 101

Lab fee: \$2.00

MUS 251 Audio Production I 4 credits

Examination of recording techniques in the studio and for live performance. Analog and digital formats will be explored, as will elements of post-production.

Lecture: 3 hours – Lab: 2 hours

Lab fees: \$3.00

MUS 252 Audio Production II 4 credits

Continuation of MUS 251. Further exploration of recording and sound reinforcement techniques and principles, in addition to post-production issues.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: Successful completion of MUS 251–Audio Production I

Lab fees: \$3.00

MUS 253 Audio Production III 4 credits

Continuation of MUS 252. Further exploration of recording and editing techniques and principles, in addition to maintenance and repair.

Lecture: 3 hours - Lab: 2 hours

Prerequisite: Successful completion of MUS 252–Audio Production II

Lab fees: \$3.00

MUS 290 Capstone Experience in Music (On Demand) 3 credits

A capstone course focusing on music. Students will work on developing techniques and methodologies in the field of music. Students will apply these techniques to a project of their own design, and participate in summative testing of their academic skills.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Open only to Associate of Arts and Associate of Science students preparing to graduate within 2 academic quarters.

Lab fee: \$2.00

MUS 299 Special Topics in Music (On Demand) 1 to 5 credits

Detailed examination of selected topics in music.

Lecture: Variable hours – Lab: Variable hours

Prerequisite: Permission of instructor

Lab fee: \$2.00

Natural Science (NSCI)

Note: Courses taught at a distance (Distance Learning [DL]) may have a higher lab fee than traditionally taught courses and some may require a refundable deposit on laboratory kits.

A mandatory safety lesson (normally given in the laboratory) must be completed before the student is admitted to certain natural science laboratory sessions. Approved safety goggles are required for some laboratory sessions and may be purchased through the bookstore. Attendance during the first week of class is mandatory and may affect a student's continued enrollment in these classes. Students must complete 60% of the laboratories in the course to receive credit.

NSCI 101 Natural Science I (A, W, SP, SU,–DL) 5 credits

This course covers the evolution of the physical and biological sciences from antiquity to the modern era. Topics include early ideas of the physical world, the principles of mechanics and optics, microscopy and its role in the development of cell and germ theory, germ theory, the atomic nature

of matter, and the classification and bonding of the elements. Related laboratory and demonstrations. Safety training and goggles are required for the laboratory. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus. For total distance courses, the students will be mailed a laboratory kit which requires a refundable deposit.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: Placement into ENGL 101 and placement into MATH 102 or higher.

Lab fee: \$19.00

NSCI 102 Natural Science II (A, W, SP, SU, -DL) 5 credits

A continuation of NSCI 101. Topics include the laws of chemical combination, chemical reactions, evolution and natural selection, the diversity of life and ecology, the concept of energy, heat and thermodynamics, kinetic theory, electricity and magnetism, the nature of light, and quantum mechanics. Related laboratory and demonstrations. Safety training and goggles are required for the laboratory. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus. For total distance courses, the students will be mailed a laboratory kit which requires a refundable deposit.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: NSCI 101 or equivalent

Lab fee: \$ 19.00

NSCI 103 Natural Science III (A, W, SP, SU, -DL) 5 credits

This course integrates the study of chemistry and biology with an emphasis on topics which have had an impact on the development of science in the twentieth century. Topics include the ways scientists communicate information, the modern advances of organic chemistry and biochemistry, protein synthesis, the processes of mitosis and meiosis, and genetics. Discussions cover scientific information as well as any ethical and moral implications of scientific advances. Related laboratory and demonstrations. Safety training and goggles are required for the laboratory. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus. For total distance courses, the students will be mailed a laboratory kit which requires a refundable deposit.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: NSCI 102, equivalent, or permission of instructor

Lab fee: \$19.00

Natural Sciences 110 Science and Ethical Thought (On Demand)

5 credits

An introduction to the complex relationship between science and ethics and how it relates to today's political and social climate. After briefly discussing the history of ethics, students will research and discuss important topics centered on social issues, environmental issues, technological issues, and medical issues. The student will be responsible for readings, handouts, writing and opinion assignments, and group projects.

Lecture: 5 hours

Prerequisite: Eng 101

Lab Fee : \$ 6.00

Nuclear Medicine Technology (NUC)

NUC 149 Introduction to Clinical Nuclear Medicine Technology (W) 3 credits

This course is a basic introduction to nuclear medicine principles and clinical procedures. Areas of emphasis include fundamentals of nuclear

medicine imaging, radiation safety, patient care and venipuncture.
Lecture: 1 hour – Lab: 0 hours
Prerequisites: Completed health record, acceptance into the Nuclear Medicine Technology program and NUC 200.

NUC 200 Introduction to Nuclear Medicine Technology (AU) 3 credits

This course is a prerequisite for all other Nuclear Medicine Technology courses. Areas of emphasis include fundamentals of nuclear medicine imaging, medical ethics, quality control testing, and radiopharmaceuticals.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: Admission to program

NUC 213 Physics and Nuclear Imaging I–LEC (W) 3 credits

This course will introduce the basic concepts of the atom, nuclear physics, interactions between radiation and matter, and nuclear imaging and counting devices. Lectures will emphasize the fundamentals of radioactivity and radioactive decay, radionuclides, basic statistics and quantitative measurements used in nuclear medicine, and computers and computer programming.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: NUC 200

NUC 214 Physics and Nuclear Imaging I–LAB (W) 1 credit

This course will introduce the basic concepts of the atom, nuclear physics, interactions between radiation and matter, and nuclear imaging and counting devices. Lab exercises will emphasize the fundamentals of radioactivity and radioactive decay, radionuclides, basic statistics and quantitative measurements used in nuclear medicine, and computers and computer programming.

Lecture: 0 hours – Lab: 2 hours
Prerequisite: NUC 200
Lab fee: \$10.00

NUC 215 Physics and Nuclear Imaging II–LEC (SP) 3 credits

This course serves as a continuation of NUC 210–Physics and Nuclear Imaging I. This course will consist of a lecture series that will provide an in-depth study of the electronics of imaging and counting devices, fundamentals of collimation, operational characteristics of radiation detector systems and imaging devices including Anger type single and multicrystal cameras, single photon emission computerized tomography (SPECT), positron emission tomography (PET) detectors, and scintillation probe, survey meter, and dose calibrator type counting devices.

Lecture: 3 hours – Lab: 0 hours
Prerequisites: NUC 213, NUC 214

NUC 216 Physics and Nuclear Imaging II–LAB (SP) 3 credits

This course serves as a continuation of NUC 210–Physics and Nuclear Imaging I. This course will consist of a lab series that will provide an in-depth study of the electronics of imaging and counting devices, fundamentals of collimation, operational characteristics of radiation detector systems and imaging devices including Anger type single and multicrystal cameras, single photon emission computerized tomography (SPECT), positron emission tomography (PET) detectors, and scintillation probe, survey meter, and dose calibrator type counting devices.

Lecture: 0 hours – Lab: 2 hours
Prerequisites: NUC 213, NUC 214
Lab fee \$10.00

NUC 217 Physics and Nuclear Imaging III (SU) 3 credits

This course is a continuation of NUC 211–Phys & Nuclear Imaging III. Through lecture, it will emphasize record keeping, nuclear regulations and licensure, and an advanced study of the operational characteristics of single photon emission computerized tomography (SPECT), Positron Emission Tomography (PET), and single and multicrystal camera operations and performance. This course will also provide an in-depth knowledge of nuclear imaging and counting device quality control, quality assurance,

and acceptance testing programs.

Lecture: 3 hours
Prerequisite: NUC 215, NUC 216

NUC 218 Physics and Nuclear Imaging III (SU) 3 credits

This course is a continuation of NUC 211 Phys & Nuclear Imaging III. Through lab exercises, it will emphasize record keeping, nuclear regulations and licensure, and an advanced study of the operational characteristics of single photon emission computerized tomography (SPECT), Positron Emission Tomography (PET), and single and multicrystal camera operations and performance. This course will also provide an in-depth knowledge of nuclear imaging and counting device quality control, quality assurance, and acceptance testing programs.

Lecture: 0 hours – Lab: 2 hours
Prerequisite NUC 215, NUC 216
Lab fee: \$10.00

NUC 232 Radiation Safety & Protection (A) 2 credits

This course enables students to understand the duties of a Radiation Safety Officer (RSO) and a radiation safety program. The radiation safety program outlines the radiation protection of technologists and the public by teaching the basis of radiation measurement, the practical methods of radiation protection (time, distance, and shielding), use of personnel monitoring devices, compliance with federal, state, and local regulations including ALARA, maintenance of required records, compliance with receipt and disposal regulations of all radionuclides, supervision of a quality management program for therapeutic dosages and follow-up procedures, performance of appropriate radiation surveys and decontamination procedures, disposal of radioactive waste, and conduction of in-service education programs.

Lecture: 2 hours – Lab: 0 hours
Prerequisite: Accepted into program

NUC 234 Radiochemistry and Radiopharmacy I (W) 3 credits

This course will emphasize the basics of operating a hospital or commercial based nuclear pharmacy by emphasizing radiopharmaceutical receipt and storage, physical and biological characteristics of radiopharmaceutical generators, preparation, quality control, activity unit calculations, administration of diagnostic and therapeutic radiopharmaceuticals, and FDA, NRC, and State Regulations. All commonly used radiopharmaceuticals will be discussed along with their associated methods of localization.

Lecture: 3 hours – Lab: 0 hours
Prerequisites: NUC 232, CHEM 113

NUC 235 Radiochemistry and Radiopharmacy II (SP) 4 credits

This course is a continuation of NUC 234–Radiochemistry and Radiopharmacy I and will review and practice during lecture and lab exercises the basics of operating a hospital or commercial nuclear pharmacy by emphasizing radiopharmaceuticals, generators, radiopharmaceutical preparation, radiopharmaceutical quality control, radiopharmaceutical activity and unit calculations, administration of diagnostic and therapeutic radiopharmaceuticals and FDA, NRC, and State regulations. All commonly used radiopharmaceuticals will be discussed along with their associated methods and localization.

Lecture: 3 hours–Lab: 2 hours
Prerequisites: NUC 234, CHEM 113
Lab Fee: \$75.00

NUC 240 Seminar I (A) 1 credit

This class will devote class sections for the discussion of new technology including techniques, imaging modalities, and equipment. In addition the students will prepare a literature search project that will review the nuclear medicine literature for pertinent changes in the nuclear medicine core areas.

Lecture: 1 hour – Lab: 0 hours
Prerequisite: NUC 252

NUC 241 Seminar II (W)**1 credit**

This class will continue to devote class sections for the discussion of new technology including techniques, imaging modalities, and equipment. This class will also discuss responsibilities including the preparation of a nuclear medicine budget, the purchase/lease of new equipment, and administrative duties including a review of the insurance and governmental reimbursement process.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: NUC 240

NUC 242 Seminar III (SP)**1 credit**

This class is a continuation of Seminar II and in addition will include a comprehensive review of the content areas covered by the American Registry of Radiological Technologists (ARRT [N]), and the Nuclear Medicine Technology Certification Board (NMTCB) examinations.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: NUC 241

NUC 251 Clinical Theory and Procedures I (SP)**5 credits**

This course sequence introduces to the student how a diagnostic study is completed from start to finish. Pre-study preparations will be emphasized including scheduling of patients, choosing the proper radiopharmaceutical, basic patient preparations, and providing patient care and maintaining communication. General study procedures will then be introduced by reviewing the applicable anatomy/physiology and methods of pharmaceutical localization, and then discussing the performance of imaging procedures including selecting the proper camera or instrument, introducing proper patient and camera positioning, utilizing imaging techniques and methodologies, and performing data manipulation, image processing, and image critique. Adult/pediatric considerations and procedures will be discussed.

Lecture: 4 hours – Lab: 2 hours

Prerequisites: NUC 200, NUC 234

Lab fee: \$20.00

NUC 252 Clinical Theory and Procedures II (SU)**5 credits**

This course will continue to emphasize the fundamentals previously introduced in Section I while covering procedures that study the cardiovascular, central nervous, endocrine, gastrointestinal, genitourinary, pulmonary, and musculoskeletal systems. Adult/pediatric considerations and procedures will be discussed. Cross sectional or SPECT images will be emphasized.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: NUC 251

Lab fee: \$20.00

NUC 254 Clinical Theory and Procedures III (SU)**5 credits**

This course will continue to emphasize the fundamentals previously introduced in Sections I & II while covering additional procedures that study the hematological system, infection imaging, and tumor imaging. Special emphasis will be placed on Positron Emission Tomography (PET) methodologies including fusion technologies that allow the superimposition of PET with CT or MRI Images. Adult/pediatric considerations and procedures will be discussed. Therapeutic procedures will also be studied including therapies of the endocrine, hematological, intracavitary, and skeletal systems. An in-depth study of federal (NRC and FDA) and state regulations regarding therapy procedures will be reviewed.

Lecture: 4 hours – Lab: 2 hours

Prerequisite: NUC 252

Lab fee: \$20.00

NUC 260 Clinical Practicum I (SP)**3 credits**

In this first clinical practicum, the student will rotate through clinical hospitals and private offices and, while accompanied by a registered Nuclear Medicine Technologist, will become familiar with the care and positioning of the patient and camera. Proficiency requirements are completed using

a competency-based format. Students are required to complete a portion of the “Required and Elective Procedures” list that will be reviewed at the completion of each practicum course. This “Required and Elective Procedures” list will need to be 100% completed by the end of Clinical Practicum V. A special form will be utilized to allow the student to list how the study was conducted. This same form will be utilized in the “Projects in Nuclear Medicine” class. Technologist film critique and physician interpretation are incorporated into the form to provide a correlation of all factors that comprise a finished nuclear medicine image(s) to include an analysis of the structure or organ that was imaged/counted, patient positioning, radiation protection, and date processing.

Lecture: 0 hours – Lab: 0 hours – Clinical: 16 hours

Prerequisite: NUC 234

Lab fee: \$75.00

NUC 261 Clinical Practicum II (SU)**2 credits**

As a continuation of Clinical I, Clinical II provides the practical experience for the student to work more independently as a technologist and is designed to enhance and compliment didactic/lab studies. Nuclear medicine imaging/counting procedures, instrumentation, radiopharmaceutical injection/patient preparation, data and image processing, and assisting with quality assurance procedures will be emphasized.

Lecture: 0 hour – Lab: 0 hours – Clinical: 16 hours

Prerequisite: NUC 260

Lab fee: \$75.00

NUC 262 Clinical Practicum III (A)**3 credits**

As a continuation of Clinical II, Clinical III provides the practical experience for the student to work more independently as a technologist, and is designed to enhance and compliment didactic/lab studies. Nuclear medicine imaging/counting procedures, instrumentation, radiopharmaceutical preparation under supervision, radiopharmaceutical injection/patient preparation, data and image processing, and performing/critiquing quality assurance procedures are emphasized. Film critique and physician review are continued.

Lecture: 0 hour – Lab: 0 hours – Clinical: 24 hours

Prerequisite: NUC 261

Lab fee: \$75.00

NUC 263 Clinical Practicum IV (W)**3 credits**

As a continuation of Clinical III, Clinical IV provides the practical experience for the student to work more independently as a technologist, and is designed to enhance and compliment didactic/lab studies. In addition to the hospital rotations, students are to begin rotational shifts in the commercial/hospital based radiopharmacies, radiation safety offices, radiologist/nuclear medicine physician reading rooms, and human resource departments. They are to prepare radiopharmaceuticals, communicate to patients, conduct imaging/counting/therapeutic studies, perform data and SPECT analysis, conduct image processing, and perform quality assurance procedures with little supervision. Film critique and physician review are continued.

Lecture: 0 hour – Lab: 0 hours – Clinical: 24 hours

Prerequisite: NUC 262

Lab fee: \$75.00

NUC 264 Clinical Practicum V (SP)**3 credits**

As a continuation of Clinical IV, Clinical V provides the practical experience for the student to work more independently as technologist, and is designed to enhance and compliment didactic/lab studies. Students in addition to the hospital rotations are to continue to rotate through commercial/hospital based radiopharmacies, radiation safety offices, radiologist/nuclear medicine physician reading rooms, and human resource departments. Students will be required to present their completed “Required and Elective Procedures” list in which they will prove their competency to perform the preparation of radiopharmaceuticals, communicate to patients, conduct imaging/counting/therapeutic studies, perform data and SPECT analysis, conduct image processing, and perform quality assurance procedures with little supervision. Film critique and physician

review are continued.

Lecture: 0 hour – Lab: 0 hours – Clinical: 24 hours

Prerequisite: NUC 263

Lab fee: \$75.00

NUC 270 Case Studies I (A)

1 credit

This course will allow students to critique how a nuclear medicine study was conducted and to understand differential diagnosis based on that study. Cases presented will come from the archives of the clinical sites or the Society of Nuclear Medicine either in the form of films to be shown on a view box, computer display, or from a CD-ROM that can be viewed off site if necessary. The students will also present interesting cases. Students will be responsible for filling out a critique and diagnosis form for each case reviewed.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: NUC 261

NUC 271 Case Studies II (W)

1 credit

This class will be a continuum of NUC 270 Case Studies I. The students will conduct the case studies in this course by completing a predetermined number of mandatory and elective case studies. The students will be responsible for conducting the patient exam from start to finish, and to complete a form for each case study. Conduction of the exam is to include: taking the patient history, determining the pre-test diagnosis, preparing and administering the radiopharmaceutical, preparing, positioning, computing, and completing the exam on a camera/computer/counting device, critiquing the exam, displaying/presenting the exam to a radiologist or nuclear medicine physician, and explaining the post-test diagnosis and problems encountered while conducting the examination. Presentations to the class will be an integral part of the course.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: NUC 270

NUC 273 Projects in Nuclear Medicine Technology (SP)

1 credit

This course will enable the student to conduct a project that will contribute to what the student will utilize in their future career. In most cases, a procedure manual will be required to be completed that will be 75% prepared from the completion of the “Required and Elective Procedures” list that was utilized in Clinical Practicum classes I-V. A special form will be utilized that will standardize the manual. This form will be given to the student beginning in Clinical Practicum I, which will enable the student to accumulate these procedures as they progress through their Clinical Practicum courses.

Lecture: 1 hours – Lab: 0 hours

Prerequisite: NUC 271

NUC 280 Cross Modality Directed Practice (SP)

2 credits

This course is designed to present the theory and operation of CT technology, to include quality management and an overview of pertinent sectional anatomy in a didactic format, followed by supervised clinical education at multiple imaging facilities.

Lecture: 1 hour

Lab: 5 hours

Prerequisite: NUC 263

Nursing (NURS)

NURS 100 Health Assessment in Nursing (A, SP)

3 credits

The student will be involved in holistic assessments of clients across the life span with consideration to ethnic variations. Developmental considerations in the geriatric and pediatric client will be discussed. Legal ramifications of nursing assessment will be presented. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hour – Lab: 3 hours

Prerequisite: Admission to Nursing or permission of instructor

Corequisites: BIO 261, ENGL 101 or 111, NURS 110

Lab fee: \$45.00

NURS 109 Student Transition (A, W, SP, SU)

1 credit

This course is designed to assist the student who has life experience credit for one or more designated nursing courses with transition into the nursing sequence. The components of the course include socialization into the Associate Degree Nursing student role at Columbus State, nursing process, communications skills, and selected psychomotor skills.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: Acceptance into Nursing via LPN route or transfer student route

Lab fee: \$39.00

NURS 110 Introduction to Nursing (A, SP)

3 credits

The student will examine the historic and current role of the nurse in the health care delivery system. The nursing process is introduced as a method for planning care and self-care activities that promote, maintain, and restore health in adult and geriatric clients. Communication techniques, teaching/learning principles, and computer skills used by the nurse in delivery of care will be discussed. The student will examine the economics and services available within the health care delivery system. Ethical and legal issues as they relate to the practice of nursing are introduced. Safe implementation of technical skills with a holistic approach and attention to cultural consideration is stressed. Beginning principles of critical thinking are discussed. Clinical experiences are provided in a variety of community settings 4 hours each week. Lab hours include the total number of hours for clinical and seminar. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 1 hour – Lab: 6 hours

Prerequisite: Admission to Nursing

Corequisite: BIO 261, ENGL 101 or ENGL 111, and NURS 100

Lab fee: \$44.00

NURS 111 Health Promotion of Women and Families (W, SU)

6 credits

The student will focus on the role of the nurse as a provider of care in the promotion of health for women and families. The influence of cultural diversity and health care economics on women and families will be included. The student will use the nursing process in providing care and promoting self-care activities. Emphasis will be placed on the teaching/learning process. Concepts of mental and spiritual health will be introduced. Community resources available to women and families will be examined. Clinical experiences will be provided in a variety of community settings 7 hours each week. The student will begin application of critical thinking principles. Lab hours include the total number of hours for clinical and seminar. Students must receive a C or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hour – Lab: 9 hours

Prerequisites: NURS 110, NURS 100, BIO 261, ENGL 111 or ENGL 101

Corequisite: BIO 262, PSY 240, NURS 123, and NURS 132

Lab fee: \$34.00

NURS 112 Introduction to Nursing Concepts of Health Maintenance and Restoration (A, SP)

6 credits

The student will focus on the role of the nurse as a provider of care for persons in need of maintenance and/or restoration of health. The student will study the impact of developmental levels and the effect of acute, chronic or terminal conditions as they relate to the ability of the person and family to care for themselves. The physical, psychological, and spiritual well being of the person and family during the dying and death process will be emphasized. The concepts studied include perioperative nursing, pain management, infectious processes, cancer, fluid and electrolyte imbalances, and altered nutrition. A variety of community settings for adults and children will be utilized for the clinical experience scheduled 10 hours each week. Lab hours include the total number of hours for clinical and seminar. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 12 hours
Prerequisites: NURS 111, NURS 123, NURS 132, BIO 262, and PSY 240
Corequisites: NURS 124, NURS 133, Bio 263
Lab fee: \$55.00

NURS 123 Nursing Skills I (W, SU) 2 credits

This is the first of two nursing skills courses. In this course, the student is introduced to the principles and concepts underlying the performance of select nursing skills as the technical aspects necessary in performing those skills will be discussed. Critical thinking and communication techniques, which are integral components of the application of these skills in nursing practice, are included. In each unit of instruction the legal, ethical, and economic issues related to the skills will be presented. This is part of the nursing skills course.

Lecture: 1 hour – Lab: 3 hours
Prerequisites: NURS 110, NURS 100
Corequisites: NURS 111, NURS 132
Lab fee: \$45.00

NURS 124 Nursing Skills II (A, SP) 2 credits

Principles and concepts underlying the performance of select nursing skills as well as the technical aspects necessary in performing those skills will be discussed. Critical thinking and communication techniques, which are integral components of the application of these skills in nursing practice, are included. As a provider of care, the nurse implements nursing skills with consideration to the developmental level of the person and to the venue in which they practice. In each unit of instruction the legal, ethical and economic issues related to the skills will be presented. This is part one of the nursing skills course. Students must receive a “C” or better in this course as a prerequisite for subsequent courses

Lecture: 1 hour – Lab: 3 hours
Prerequisites: NURS 123, 132
Corequisite: NURS 133
Lab fee: \$50.00

NURS 132 Concepts of Pharmacology I (W, SU) 2 credits

The student is introduced to the general principles of pharmacology. This is the first of two courses where the focus will be on the nurse’s role in drug administration to person’s of all ages and the effects of medications on patients. Drug classifications and their relationship to promotion, maintenance and restoration of health will be presented Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 0 hours
Prerequisites: NURS 110, NURS 100
Lab fee: \$39.00

NURS 133 Concepts of Pharmacology II (A, SP) 2 credits

This is the second of two courses where the focus will be on the nurse’s role in drug administration to persons of all ages and the effects of medications on patients. Drug classifications and their relationship in promotion, maintenance and restoration of health will be presented. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 0 hours
Prerequisite: NURS 132 or permission of instructor.
Corequisite: NURS 124
Lab fee: \$41.00

NURS 188 Neonatal Nursing (W, SU) 2.5 credits

The student will focus on the role of the nurse as the provider of care for the high risk neonate and their families. This course will focus on neonatal development and potential complications antepartum and post partum periods. The student will gain specialized knowledge and skills to provide care ranging from pre-hospitalization through postdischarge and follow-up. Students must receive a grade of “C” or better in this course as a prerequisite for subsequent courses. This course may be used to fulfill the elective requirement for nursing.

Lecture: (Online) 2 hours – Lab: 1 hr (on campus, [5 two hour labs])

Prerequisite: NURS 112
Lab Fee: \$15.00

NURS 189 Principles of Basic Trauma Nursing (SU, W) 3 credits

This course is designed to introduce the student to the basic concepts of trauma nursing. The focus of the course will be the exploration of major concepts and issues underlying the specialty of trauma nursing. Through an organized and standardized approach, students will review the mechanisms of injury, problems arising from these injuries, and related nursing care. The course will include content about adult trauma nursing, triage, airway management, shock/cardiac arrest, trauma to specific anatomic and physiologic systems, psychosocial impact of trauma, and organ donation. Learning opportunities will include use of the Human Patient Simulator. Students must receive a grade of “C” or better in this course as a prerequisite for subsequent courses. This course may be used to fulfill the elective requirement for nursing.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: Nursing 211 or permission of the instructor
Lab fee: \$25.00

NURS 190 Holistic Interventions for Health Care Practitioners (A, SP) 2 credits

The student will be introduced to various healing modalities and complementary therapies that are used by health care practitioners to provide holistic care to a patient. Included will be an overview of the body/mind paradigm and a survey of commonly used techniques such as guided imagery, meditation and therapeutic touch. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 0 hours
Prerequisite: Admission to a health technology or permission of instructor
Lab fee \$5.00

NURS 191 Basics of Gerontological Nursing (W, SP,–DL) 3 credits

The student is introduced to the basic concepts of gerontological nursing. The focus is on meeting the needs of the elderly. Assessment, maintenance and restoration of health for those over the age of 65 is presented. The nursing process is used as the framework for the development of thinking skills. Content will reflect on the influence of the legal, ethical, cultural and economic issues related to the health care needs of the elderly. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 0 hours
Prerequisite: Admission to a health technology or permission of instructor
Lab fee: \$5.00

NURS 192 Introduction to Community Nursing (On Demand) 3 credits

The course is designed to introduce students to the basic concepts of Community Health Nursing. The focus of this course is exploration of the major concepts and conceptual issues underlying the specialty of Community Health Nursing. The course is intended to assist students in clarifying conceptual issues in the specialty and to begin to develop positions on critical issues related to access to care and analysis of existing delivery systems. The course will also provide the tools of practice necessary for the registered nurse already working in a community setting. Assessment, promotion, maintenance and restoration of health are presented for families, communities and common community health problems. The nursing process is used as the framework for critical thinking skills. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: NURS 112 or permission of instructor
Lab fee: \$5.00

NURS 193 End of Life Care (A, SP,–DL) 2 credits

The student will be introduced to various nursing interventions appropriate at the end of life. Included will be an overview of commonly experienced problems. Nine critical areas including palliative care, quality of life, pain symptom management, communication needs of caregivers, the dying process, ethics and bereavement will be explored. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours—Lab: 0 hours

Prerequisite: Admission to a Health Technology or permission of the instructor.

Lab fee: \$5.00

NURS 194 Using Advanced Nursing Skills to Manage the Care of Critically Ill Adult Patients (A, SP) 3 credits

The student will be exposed to the advanced theory and skills needed to manage the care of individuals in a variety of critical care areas. The focus will be on identifying critical situations and potential problems and selecting and implementing the appropriate interventions. Students will apply theory and skills to case studies and clinical situations. Students will be exposed to such advanced skills as cardiac monitoring, hemodynamic monitoring, ventilator support, critical care drugs, emergent and code situations using case studies and simulated patient care situations. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture 3 hours – Lab: 0 hours

Prerequisite: NURS 112, or permission of instructor

Lab fee: \$25.00

NURS 195 Nursing Concepts Enhancement I (W, SU) 1 credit

The course is designed to assist the student to meet the outcomes of the nursing curriculum through enhanced test-taking skills. Students will apply nursing concepts to formulating responses in testing situations. This course may NOT be used to fulfill the elective requirement for nursing

Lecture: 1 hour – Lab: 0 hours

Prerequisites: NURS 112 and Nursing Outcome Exam I completed

Lab fee: \$34.00

NURS 196 Nursing Concepts Enhancement II (A, SP) 1 credit

The course is designed to assist the student to meet the outcomes of the nursing curriculum through enhanced test-taking skills. Students will apply nursing concepts to formulating responses in testing situations. This course may NOT be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 0 – Lab: 3hours

Prerequisite: NURS 212 and exit Nursing Outcome Exam completed

Lab fee: \$28.00

NURS 197 Current Trends in Pediatric Nursing (W) 3 credits

The course is designed to build on the foundation of nursing from previous nursing courses. The focus of the course is to explore the health care needs of pediatric clients and their families. The nursing process will be the framework to study the physical, psychological and social aspects of pediatric nursing care. The course will provide students with the opportunity to apply knowledge and skills by using simulated pediatric care situations. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: NURS 111

Lab fee: \$20.00

NURS 198 Information Technology in Healthcare (A,SP,–DL) 3 credits

This introductory course in computer applications will help to stimulate the attainment of knowledge and skills needed to function in today’s

computerized environment. Emphasis is placed on the application of information technology used in health care. The impact of information technology on society will be considered. Legal, ethical and social issues as they relate to technology will be covered. Learning activities will include using standard software applications such as: word processing, graphics and presentation software. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: None

Lab fee: \$5.00

NURS 199 Healthcare Mission (A,W, SU) 1 credit

This course will provide students with an opportunity to travel to Mexico and gain exposure to Mexican culture. Students will work with primary health care providers in an ambulatory care clinic. Students will use nursing skills to deliver outpatient health care to Mexican clients of all ages. Travel expenses will be paid by the student and will be approximately \$600.00. Students will be in Texas and Mexico for 3 nights and 4 days. Students should have a valid United States passport. This course may be used to fulfill the elective requirement for nursing. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 0 hours – Lab: 32 hours

Prerequisites: Nursing 112 and permission of the instructor following an interview, review of applicant’s essay and recommendations from prior clinical instructors

Lab fee: \$5.00

NURS 210 Nursing Concepts of Health Maintenance and Restoration (W, SU) 6 credits

The student is introduced to the concepts of care management while continuing to function as a provider of care and promoter of health for pediatric and adult clients. The focus is on meeting the holistic needs of the client. Maintenance and restoration of health are presented in relation to the integumentary, gastrointestinal, urinary, sensory, and endocrine systems. The nursing process is the framework for continued development of critical thinking skills. Each unit of instruction will contain content on the influence of legal, ethical, cultural, and economic issues related to health care. In the clinical component of the course, which meets 10 hours each week and is conducted in a variety of community settings, the student is accountable for his/her nursing practice. The Nursing Outcome Exam, covering the first three quarters of nursing, will be given during the initial weeks of the quarter. Lab hours include the total number of hours for clinical and seminar. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 12 hours

Prerequisites: NURS 112, NURS 124, NURS 133, and BIO 263

Corequisites: BIO 115 and ENGL 102 or ENGL 111

Lab fee: \$40.00

NURS 211 Nursing Concepts of Health Maintenance and Restoration II (A, SP) 6 credits

The student continues to develop the role of manager of care while providing care and promoting health of pediatric and adult clients. The focus is on meeting the holistic needs of clients. Maintenance and restoration of health are presented in relation to the respiratory, cardiovascular, hematological, and reproductive systems. The nursing process is the framework for continued development of critical thinking skills. Each unit of instruction will contain content on the influence of legal, ethical, cultural, and economic issues related to health care. In the clinical component of the course, which meets 10 hours each week and is conducted in a variety of community settings, the student is accountable for his nursing practice. Lab hours include the total number of hours for clinical and seminar. Students must receive a “C” or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 12 hours

Prerequisites: NURS 210, a passing score on Nursing Outcome Exam I, and BIO 215

296 Lab fee: \$34.00

NURS 212 Nursing Concepts of Health Maintenance and Restoration III (W, SU) 6 credits

The student continues to develop the role of manager of care while providing care and promoting health of pediatric and adult clients. The focus is on meeting the holistic needs of clients. Maintenance and restoration of health are presented in relation to mental health, and the neurological, musculoskeletal, and immune systems. The nursing process is the framework for continued development of critical thinking skills. Each unit of instruction will contain content on the influence of legal, ethical, cultural, and economic issues related to health care. In the clinical component of the course, which meets 10 hours each week and is conducted in a variety of community settings, the student is accountable for his/her nursing practice. Lab hours include the total number of hours for clinical and seminar. Students must receive a "C" or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 12 hours

Prerequisite: NURS 211

Lab fee: \$40.00

NURS 213 Concepts of Nursing Management (A, SP) 8 credits

The student will synthesize concepts of care management to develop leadership skills inherent in the profession of nursing. The student will assume the roles of provider of care, manager of care, and member within the discipline of nursing. Ethical, legal, political, and economic issues as they relate to professional nursing will be presented. Current trends in nursing practice are analyzed. The student will focus on holistic care of groups of clients and their families in the promotion of self-care activities. The clinical experience will be conducted in a variety of community settings 16 hours each week. The Nursing Outcome Exam, covering the previous six quarters in nursing, will be given the beginning of the quarter. Students must achieve a minimum percentile score on this outcome exam in order to graduate. Lab hours include the total number of hours for clinical and seminar. Students must receive a "C" or better in this course as a prerequisite for subsequent courses.

Lecture: 2 hours – Lab: 18 hours

Prerequisites: NURS 212 and MATH 135

Lab fee: \$34.00

Nursing Certificate Programs (NURC)

NURC 101 (formerly Mult 120) Nurse Aide Training Program (A, W, SP, SU) 5 credits

The Nurse Aide Training Program (NATP) is designed to instruct students and prospective long-term care nurse aides in the skills needed to provide basic care for clients in long term care settings. The 76 hour NATP course includes 60 hours of classroom/lab instruction and 16 hours of clinical preparation, which meet the requirements for nurse aide training in Ohio. Since the course follows state and federal guidelines, class and clinical attendance is mandatory.

Lecture: 3 hours – Lab: 6 hours

Prerequisites: Completed health record, placement into ENGL 101, placement into DEV 031, and placement into "no reading required", or permission of instructor

Lab fee: \$38.00

NURC 102 (formerly Mult 126) Patient Care Skills (A, W, SP, SU) 4 credits

This course presents the rationale for and practice of skills commonly used by patient care technicians in an acute care setting. It is a combination of lecture and laboratory skills demonstration and practice. Major topics include wound care, specimen collection, airway care, oxygen administration, enteral nutrition, and elimination assistance. Because this is a skills based course, classroom and laboratory attendance is mandatory.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: NURC 101 with a grade of "C" or better, placement into

ENGL 101, placement into DEV 031, and placement into "no reading required"

Lab fee: \$35.00

NURC 175 (formerly Mult 175) Principles of Homeopathy (W) 4 credits

This course is designed to introduce students to the principles and theories behind the use of homeopathic preparations to treat most disease and disorders.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$5.00

NURC 176 (formerly Mult 176) Fundamentals of Herbology (A) 4 credits

This course outlines the uses of herbs in the healing process from ancient history to present day. Herbs will be discussed in relation to both flowers and in cooking. Emphasis will be on therapeutic self-care first aid.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$5.00

NURC 177 (formerly Mult 177) Holistic Healing Methods (SP) 4 credits

This course offers an introduction to the fundamentals of holistic healing, which includes philosophical and theoretical foundations, alternative methods and their uses for health maintenance and development of personal healing capacities.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$5.00

NURC 178 (formerly Mult 275) Advanced Homeopathic Theories (A, W, SP, SU) 4 credits

This course will discuss homeotoxicology and details of homeopathic care in acute and chronic conditions as they relate to self-care. Referral protocols will also be addressed.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: MULT 175 or permission of instructor

Lab fee: \$5.00

NURC 179 Pranic Healing Level I (A, W) 2credits

This course provides the foundation of theory and skills of the MCKS Pranic Healing System. Course topics include principles of self-recovery and life force, energetic anatomy, the relationship of energy centers to body systems, energy field scanning techniques, procedures for correcting energy imbalances associated with pain, stress and common ailments, breathing/physical exercises to restore well-being, energetic hygiene for practitioners, stress reduction through meditation, as well as self healing, environmental healing and long distance healing. Lecture: 2 hours – Lab: 0 hours

Lab fee: \$5.00

NURC 245 (formerly Mult 245) RN First Assistant Program (A, SP) 5 credits

This is an intensive training program which is designed to provide the experienced perioperative nurse with the advanced preparation and study necessary to assume the role of first assistant. The course is based on AORN's official statement of the RNFA role.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Current RN licensure; two years current perioperative experience; CNOR certified or eligible; current ACLS or CPR; liability insurance; two letters of recommendation

Lab fee: \$8.00

NURC 246 (formerly Mult 246) RNFA Experiences in the Operating Room (W, SU) 4 credits

This course provides the student with continued practicum for completion of the RN First Assistant Program.

Lecture: 2 hours – Lab: 14 hours
Prerequisite: NURC 245
Lab fee: \$8.00

NURC 250 (formerly Mult 250) NATP Train the Trainer (A, W, SP, SU) 3 credits

This course prepares qualified nurses to teach, coordinate, and supervise a Nurse Aid Training Program, meeting Federal and State of Ohio requirements.

Lecture: 3 hours – Lab: 0 hours
Prerequisites: Current RN/LPN licensed in Ohio; minimum of two years experience in caring for elderly or chronically ill.
Lab fee: \$39.00

For Practical Nursing (PNUR) courses, see page 307

Office Administration (OADM)

OADM 101 Business Grammar (A, W, SP, SU,–DL) 4 credits

This course is a structured program reviewing the parts of speech in detail. In addition, it is designed to assist the student to become skillful in sentence analysis, word choice, punctuation, vocabulary, capitalization, number expression, and spelling. Any DEV classes needed are to be taken before scheduling this challenging review course. It is recommended that students take OADM 101 prior to ENGL 101. Office Administration majors must earn a “C” grade or better in OADM 101 as one of the two prerequisites for OADM 102 Editing Business Documents.

Lecture: 3 hours – Lab: 2 hours

OADM 102 Editing Business Documents (W, SP) 3 credits

Editing Business Documents is a course that has application for anyone who writes, edits, or prepares final copy for distribution or publication. Includes basic rules regarding grammar usage and aspects of style, as well as techniques and procedures for producing many different kinds of written communications. In addition to editing and proofreading at the computer, letters, memos, and reports will be formatted.

Lecture: 2 hours – Lab: 3 hours
Prerequisites: OADM 101 with “C” grade or higher and OADM 132 or permission of instructor
Lab fee: \$3.00

OADM 111 Accounting Basics (A,W, SP, SU) 4 credits

This course is designed to provide students with a basic understanding of accounting principles and procedures including analysis of business transactions, journalizing, posting, adjusting and closing entries, and financial statement preparation. Also included are transactions involving payroll accounting, bank accounts, and cash funds. Any DEV math classes needed are to be taken before scheduling this course.

Lecture: 3 hours – Lab: 2 hours

OADM 113 Quickbooks (A, SP,–DL) 1 credit

Introductory course for Quickbooks accounting software in which students learn to keep a set of computerized books for a small company. Any DEV math classes needed are to be taken before scheduling OADM 113. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Lab fee: \$5.00

OADM 114 Quickbooks II (W, SP,–DL) 1 credit

Intermediate course in which students will gain additional knowledge in the use of Quickbooks software. Adjustment of company inventory, payroll processing, and banking transactions are covered along with other selected topics. Students should have taken OADM 113. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours – Lab: 2 hours
Lab fee: \$5.00

OADM 115 Outlook (A, SP) 3 credits

This course is a desktop information management application using the Microsoft Outlook software. The student will learn problem-solving techniques to organize and manage a variety of tasks, such as file management, calendar, e-mail, contacts, tasks, and journals. The goal of this course is to promote independent problem-solving proficiency while working simultaneously as a member of an office team. Computer experience is strongly recommended.

Prerequisite: None
Lecture: 2 hours – Lab: 3 hours
Lab fee: \$5.00

OADM 121 Records Management (A, W, SP) 3 credits

This course is designed to provide knowledge of efficient handling of business records, ARMA filing methods and systems, and principles for the selection of records systems and supplies. Any DEV classes needed should be taken before scheduling OADM 121.

Lecture: 2 hours – Lab: 3 hours

OADM 131A Keyboarding Module 1 (Alphabetic Keyboarding) (A, W, SP, SU,–DL) 1 credit

This beginning keyboarding module contains approximately one third of the lessons covered in OADM 131 Keyboarding I. The student will learn only the alphabetic keys and essential punctuation marks. Touch keying at the rate of 20 words a minute (“B” grade) or better will grant the student one-third credit toward OADM 131 Keyboarding I.

Prerequisite: None
Lecture: 0 hours – Lab: 2 hours
Lab fee: \$3.00

OADM 131B Keyboarding Module 2 (Symbols) (A, W, SP, SU,–DL) 1 credit

The student will learn the top row numbers and symbol keys in this second keyboarding module. Successful completion of the timing in Lesson 25 at 20 words a minute (“B” grade) or better will grant the student one-third credit toward OADM 131 Keyboarding I.

Prerequisite: OADM 131A
Lecture: 0 hours – Lab: 2 hours
Lab fee: \$3.00

OADM 131C Keyboarding Module 3 (Numeric Keypad) (A, W, SP, SU,–DL) 1 credit

In this third module, the student will learn the number keypad located on the keyboard. This skill is used on 10-key calculators and data entry. Passing a one-minute timing at a rate of 175 strokes per minute (“B” grade) or better with no more than a 5 percent error rate will grant the student one-third credit toward OADM 131 Keyboarding I.

Prerequisite: None
Lecture: 0 hours – Lab: 2 hours
Lab fee: \$3.00

OADM 131 Keyboarding I (A, W, SP, SU,–DL) 3 credits

An introductory interactive system of keyboarding teaching the “touch” system of typing. Development of basic keyboarding skills is measured in words per minute and accuracy of one error per minute. To receive credit for this course, students must complete all keyboarding lessons in assigned text and be able to key at least two different two-minute timings, each demonstrating a minimum speed of 25 words a minute (“D” grade) with accuracy of two or fewer errors. Students must earn a “C” grade or better as a prerequisite for OADM 132 Keyboarding II.

Lecture: 2 hours – Lab: 3 hours
Lab fee: \$3.00

OADM 132 Keyboarding II (A, W, SP, SU,–DL) 3 credits

An intermediate interactive system reinforcing keyboarding skills by touch. Applications using Microsoft Word are designed to teach formats for business correspondence, tabulations, and manuscripts with emphasis on correct techniques, proofreading, decision-making skills, and accuracy;

further development of keyboarding speed measured in words per minute and accuracy of one error per minute on three-minute timings. To receive credit for this course, students must demonstrate assigned formatting skills and be able to key at least two different three-minute timings, each demonstrating a minimum speed of 35 words a minute (“D” grade) with accuracy of three or fewer errors. Students must earn a “C” grade or better as a prerequisite for OADM 133 Keyboarding III.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: “C” grade or better in OADM 131 or proficiency test

Lab fee: \$3.00

OADM 133 Keyboarding III (W, SU - DL) 3 credits

An advanced interactive system reinforcing keyboarding skills by touch. Applications using Microsoft Word software are designed to continue instruction of business correspondence, tabulations, manuscripts, reports, and various business forms with emphasis on correct techniques, proof-reading, decision-making skills, and accuracy; further development of keyboarding speed measured in words per minute and accuracy of one error per minute on five-minute timings. To receive credit for this course, students must demonstrate assigned formatting skills and be able to key at least two different five-minute timings, each demonstrating a minimum speed of 40 words per minute (“D” grade) with accuracy of five or fewer errors. Students must earn a “C” grade or better as a prerequisite for OADM 134 Keyboarding IV.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: “C” grade or better in OADM 132 or proficiency test

Lab fee: \$5.00

OADM 134 Keyboarding IV (A) 3 credits

The focus in this course is in three areas of learning: developing keyboarding speed and accuracy, building production-level mastery on a wide variety of business documents, and using word processing functions and features to streamline the creation of professional-looking documents. To receive credit for this course, students must demonstrate assigned formatting skills and be able to key at least two different five-minute timings, each demonstrating a minimum speed of 50 words per minute (“C” grade; no “D” grade for timings) with accuracy of five or fewer errors. A grade of “C” or better is required in OADM 134 in order to graduate in the OADM program.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: C grade or better in OADM 133

Lab fee: \$5.00

OADM 139 Keyboarding Improvement (W, SP,–DL) 3 credits

This elective course is designed to provide students with increased skills in the operation of the keyboard. Greater speed and accuracy are the goals. The emphasis is on speed and accuracy using straight-copy material. The students must complete required testing and drills several days weekly to receive credit. Satisfactory/Unsatisfactory grading system.

Lecture: 1 hour – Lab: 4 hours

Lab fee: \$5.00

OADM 151 Computer Transcription (SP) 3 credits

This course is designed to develop skill in the use of machine transcription equipment. Mailable copy is the goal in transcribing audio tapes of business correspondence, technical reports, drafts, and other business communications in a broad range of business formats. Emphasis on the fundamentals of English in grammar, spelling, and vocabulary will reinforce transcription skills. Recommended: Students should complete OADM 101 and OADM 102 before taking this course.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: OADM 132

Corequisite: OADM 133

Lab fee: \$5.00

OADM 164 WordPerfect (A, SP) 3 credits

Provides a solid foundation for this word processing software. Covers basic to advanced features including the use of icons, the ruler bar, line

and page formatting, tabs, headers, footers, footnotes, endnotes, merging, tools, file management, and other selected topics. A keyboarding skill of 35 words per minute is recommended.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$5.00

OADM 167 Desktop Publishing (A, W, SP) 3 credits

Utilizes InDesign CS2 software, which is a desktop publishing program widely used to design sophisticated publications. This course begins with the basics and builds upon this knowledge to demonstrate how to work with text frames and layers, format text, apply styles, add graphics, and much more. Students will design their own personalized business cards. Requirements: 35 words per minute keyboarding skill and knowledge of a personal computer, Windows, and word processing.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$5.00

OADM 172 Excel (A, W, SP, SU) 3 credits

This is a foundation course in spreadsheets. Covers major features of the program including spreadsheet design and format, formulas, functions, and charts as well as statistical, financial, and logical functions. Applications investigate Excel’s powerful features in business situations. Recommended: Keyboarding and computer experience.

Lecture: 2 hours – Lab: 3 hours

Lab fee: \$5.00

OADM 186a Word Module 1 (A, SP,–DL) 1 credit

This is an introductory course in the Microsoft Word word-processing software. Students will learn to create and edit a document, format documents, arrange text, and use graphics along with more advanced topics. Students are responsible for the software in this distance-learning course. Recommended: Keyboarding and computer experience.

Lecture: 0 hours – Lab: 2 hours

Lab fee: \$5.00

OADM 186b Word Module 2 (A, SP,–DL) 1 credit

This is a continuation of introductory features/functions using Microsoft Word word-processing software. Students will learn to modify, maintain, and enhance documents with special features. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours – Lab: 2 hours

Prerequisite: OADM 186a

Lab fee: \$5.00

OADM 186c Word Module 3 (A, SP,–DL) 1 credit

This is an intermediate course using Microsoft Word word-processing software. Students will learn to format with special features and add visual elements. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours – Lab: 2 hours

Prerequisite: OADM 186b

Lab fee: \$5.00

OADM 186d Word Module 4 (A, SP,–DL) 1 credit

This is an advanced course using Microsoft Word word-processing software. Students will learn how to work with shared documents, share data, and other advanced features in Word. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours – Lab: 2 hours

Prerequisite: OADM 186b

Lab fee: \$5.00

OADM 187a Excel Module 1 (A, SP,–DL) 1 credit

This is an introductory course in Microsoft Excel spreadsheet software. Students will learn to create a worksheet, modify worksheets, and work with charts along with more advanced topics. Students are responsible for the software in this distance-learning course. Recommended: Keyboarding and computer experience.

Lecture: 0 hours - Lab: 2 hours
Lab fee: \$5.00

OADM 187b Excel Module 2 (A, SP,-DL) 1 credit

This is a continuation of introductory and intermediate skills using Microsoft Excel spreadsheet software. Students will learn to move data within and between workbooks, maintain workbooks, create charts in Excel, and enhance the display of workbooks. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 187a
Lab fee: \$5.00

OADM 187c Excel Module 3 (A, SP,-DL) 1 credit

This is a course using intermediate features/functions of Microsoft Excel spreadsheet software. Students will learn to format worksheets using advanced formatting techniques, work with templates and workbooks, use advanced features for financial, math, statistical, and logical functions. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 187b
Lab fee: \$5.00

OADM 187d Excel Module 4 (A, SP,-DL) 1 credit

This is a course using intermediate and advanced features/functions of Microsoft Excel spreadsheet software. Students will learn to use Excel's analysis tools, manage and audit worksheets, collaborate with workgroups, and use data from the Internet and other sources. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 187c
Lab fee: \$5.00

OADM 188a PowerPoint Module 1 (A, SP,-DL) 1 credit

This is an introductory course to Microsoft PowerPoint presentation software. Students will learn the fundamentals of creating and enhancing a presentation using clip art, charts, photographs, videos, and sound. Students are responsible for the software in this distance-learning course. Recommended: Keyboarding and computer experience.

Lecture: 0 hours - Lab: 2 hours
Prerequisite:
Lab fee: \$5.00

OADM 188b PowerPoint Module 2 (A, SP,-DL) 1 credit

This course is a continuation of introductory features/functions using Microsoft PowerPoint presentation software. Students will learn to add visual appeal, animation, and visual elements to PowerPoint presentations. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 188a
Lab fee: \$5.00

OADM 188c PowerPoint Module 3 (A, SP,-DL) 1 credit

This is a course using intermediate features/functions using Microsoft PowerPoint presentation software. Students will learn to share and connect data, link and embed objects, and share presentations. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 188b
Lab fee: \$5.00

OADM 189a Access Module 1 (A, SP,-DL) 1 credit

This is an introductory course in Microsoft Access database software. Students will learn to create, modify, and enhance a database using screen and report generators. Students are responsible for the software in this distance-learning course. Recommended: Keyboarding and computer experience.

Lecture: 0 hours - Lab: 2 hours
Lab fee: \$5.00

OADM 189b Access Module 2 (A, SP,-DL) 1 credit

This is a continuation of Microsoft Access database software features and functions. Students will learn to modify tables, create forms, create reports, and use database wizards. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 189a
Lab fee: \$5.00

OADM 189c Access Module 3 (A, SP,-DL) 1 credit

This is a course using intermediate features/functions of Microsoft Access database software. Students will learn to create and modify advanced tables, create and modify forms, refine queries, and use advanced report features. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 189b
Lab fee: \$5.00

OADM 189d Access Module 4 (A, SP,-DL) 1 credit

This is a course using intermediate and advanced features/functions of Microsoft Access database software. Students will learn to use Access tools, create database applications, and use data from the Internet and other sources. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours
Prerequisite: OADM 189c
Lab fee: \$5.00

OADM 191 Word I (A, W, SP, SU,-DL) 3 credits

Covers basic and intermediate features including formatting documents; creating bullets and numbered lists; customizing auto correct; using find/replace for words and codes; working with folders; copying, moving, and renaming files; working with blocks of text; working with windows; applying styles; customizing headers/footers; and formatting with templates. Also covered are document passwords; document properties; margins; favorites folder; shortcuts; print options; envelopes/labels; speller/grammar options; tabs/leaders; page numbers; page and section breaks; and other selected topics. A keyboarding skill of at least 35 words per minute is recommended. Students must earn a "C" grade or better in OADM 191 as a prerequisite for OADM 192 Word II.

Lecture: 2 hours - Lab: 3 hours
Lab fee: \$5.00

OADM 192 Word II (W, SU) 3 credits

Provides additional skills and refines techniques presented in OADM 191. Covers intermediate to advanced features including mail merge; tables; borders and images; special formatting features such as hyphenation, auto text, bookmarks, and customizing toolbars and menus. Also covers drawing objects and WordArt; charts; macros; styles; sorting and selecting; outlines, master documents, and subdocuments; fill-in forms; working with shared documents; and other selected topics. A keyboarding skill of at least 35 words per minute is recommended. Students must earn a "C" grade or better in OADM 192 as a prerequisite for OADM 261 Electronic Office Procedures.

Lecture: 2 hours - Lab: 3 hours
Prerequisite: "C" grade or better in OADM 191 or CIT 102
Lab fee: \$5.00

OADM 193 Office Specialist Practicum I (A, SP,-DL) 1 credit

This course is designed for students who have completed Word, Excel, PowerPoint, and Access modules 1 and 2. The course will provide students with a structured review and hands-on practice using Word, Excel, PowerPoint, and Access features and functions in preparation for office systems certification. Students are responsible for the software in this

distance-learning course.

Lecture: 0 hours - Lab: 2 hours

Prerequisites: OADM 186a, 187a, 188a, 189a, 131

Lab fee: \$5.00

OADM 194 Office Specialist Practicum II (A, SP,–DL) 1 credit

This course is designed for students who have completed Word, Excel, and Access modules 1-3, PowerPoint modules 1 and 2, and Outlook. The course will provide students with a structured review and hands-on practice using Word, Excel, PowerPoint, and Access, and Outlook intermediate and advanced features in preparation for office systems certification. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours

Prerequisites: OADM 186c, 187c, 188c, 189c, OADM 115

Lab fee: \$5.00

OADM 195 Office Integration I (A, SP,–DL) 1 credit

This course offers intermediate and advanced features to integrate Word, Excel, PowerPoint, Access, and Outlook applications. Students will learn to join office applications that work together. Students are responsible for the software in this distance-learning course.

Lecture: 0 hours - Lab: 2 hours

Prerequisites: OADM 186c, 187c, 188c, 189c

Lab fee: \$5.00

OADM 261 Electronic Office Procedures (A) 4 credits

This upper-level course is designed for second-year students who are preparing to enter an office administration position or who are currently working in an office. The student will prepare for a job search, consider topics such as incoming and outgoing communications, reprographics, travel arrangements, meetings and conferences, preparing presentations and meeting minutes, as well as other advanced topics. Students must earn a "C" grade or better in OADM 261 in order to graduate from the OADM program.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: "C" grades or better in OADM 134, OADM 188, and OADM 192 or permission of instructor.

Lab fee: \$5.00

OADM 297 Special Topics in Office Administration (On Demand) 3 credits

Detailed examination of selected topics of interest in office administration.

Lecture: 0 hours – Lab: 1 hour

Prerequisite: Varies

Lab fee: \$20.00

Paralegal Studies (LEGL)

LEGL 101 Introduction to Paralegal Studies (A, W, SP, SU) 4 credits

The role of the legal assistant, ethical responsibilities, and legal restrictions are the main focus of this course. Students will also be introduced to the function of statutes, case law, administrative regulations and constitutions within the legal system.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: ENGL 101 or placement into ENGL 101

Lab fee: \$5.00

LEGL 102 The Legal System (A, W, SP, SU) 2 credits

This course explores the federal and state civil law systems, federal and state criminal law systems, appellate process and such concepts as jurisdiction and venue.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$5.00

LEGL 103 Law Office Procedures and Management

(A, W, SP, SU)

3 credits

This course is an introduction to the day to day operation of a law office. Emphasis will be placed on the development of accurate records keeping skills and developing an understanding of office management procedures unique to law offices, including computerized time keeping and billing programs.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$5.00

LEGL 111 Legal Research and Writing I (A, W, SP, SU) 4 credits

An introduction to conducting legal research and the proper methods of preparing briefs, pleadings and memorandum of law. Locating, analyzing and checking of case law is emphasized. Students will learn proper citation methods and legal writing style, as well as becoming familiar with the Ohio and Federal Rules of appellate procedure.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 112 Legal Research and Writing II (A, W, SP, SU) 4 credits

A continuation of LEGL 111, developing advanced research skills with an emphasis on preparing legal documents. Students will be familiar with primary and secondary sources, computer assisted research and a variety of legal documents. The student will also participate in a brief writing competition.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: LEGL 111

LEGL 113 Legal Research and Writing III (On Demand) 5 credits

This course is an intense production-oriented research and writing course designed to prepare the student to function under the requirement of rapid completion of research and writing assignments commonly made in law offices, and other legal environments. The student will encounter a variety of opportunities including motions, pleadings and briefs, the production of which will require both speed and accuracy and incorporate both printed and computer-based research strategies.

Lecture: 4 hours – Lab: 2 hours

Prerequisites: LEGL 112 and LEGL 251

Lab fee: \$5.00

LEGL 114 Family Law (W, SU)

3 credits

Domestic relations matters including marriage, divorce, dissolution, child custody and support, visitation and adoptions. The law regulating such matters and the drafting of appropriate documents will be emphasized.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 119 Real Estate Transactions (A, SP)

3 credits

A study of the law governing real property, its ownership, sale, lease or other conveyance. The instruments utilized in conveyance or lease of such property will be examined and drafted. Title searching and abstracts of title are included.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 201 General Practice (A, SP)

4 credits

This course will acquaint the student with a variety of matters that may be encountered in a law practice. The basic elements of torts and contracts will be covered as well as judgments and civil collection actions.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 205 Litigation Practice and Procedure I (A, SP) 3 credits

A study of the Ohio Rules of Civil Procedure, the Federal Rules of Civil Procedure, and Federal and State Rules of Evidence. The basic elements of

a tort claim will be discussed and the initial phases of an action, the complaint pleadings and discovery and pretrial phases will be examined.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 210 Criminal Law and Procedure (A, SP) 3 credits

The Ohio Criminal Code and Rules of Criminal Procedure will be the foundation of this examination of the pretrial and posttrial procedures in a criminal case. Students will be exposed to the criminal justice system from the elements of offenses through postconviction remedies. The drafting of motions and other documents associated with criminal matters will be included.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 215 Paralegal Studies Practicum I (A, W, SP, SU) 2 credits

A guided work experience in an office or agency providing legal services. Exact duties are decided upon by agreement of the student and administrators of the placement site.

Lecture: 0 hours – Lab: 14 hours

Prerequisite: Permission of instructor

LEGL 216 Paralegal Practicum Seminar I (A, W, SP, SU) 1 credit

Seminar discussion of work experiences and the development of strategies to improve work performance.

Lecture: 1 hours – Lab: 0 hours

Prerequisite: Permission of instructor

LEGL 220 Business Organizations (A, SP) 3 credits

The fundamentals of the formation of business entities including sole proprietorships, partnerships, and corporations. Students will prepare documents regarding the formation of such organizations.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 222 Immigration Law (On Demand) 3 credits

An overview of Immigration Law and practices for assisting immigrants and illegal aliens.

Lecture: 3 hours – Lab: 0 hours

LEGL 224 Probate Law and Practice I (A, SP) 3 credits

The law of wills, estates and estate administration including estate taxation. Testate and intestate estates, law of descent and distribution, estate planning and other probate processes will be discussed.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 226 Administrative Law (A, SP) 3 credits

Statutory law, case law, and administrative rules will be utilized to develop an understanding of the role and authority of administrative agencies. Particular attention will be paid to social security and workers compensation claims.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 227 Paralegal Practicum II (A, W, SP, SU) 2 credits

Further work experience in an office or agency providing legal services. Exact duties will be decided upon by the student and administrators of the placement site.

Lecture: 0 hours – Lab: 14 hours

Prerequisite: Permission of instructor

LEGL 228 Paralegal Practicum Seminar II (A, W, SP, SU) 1 credit
Seminar discussion of current work experiences and the development of further strategies for improvement.

Lecture: 1 hours – Lab: 0 hours

Prerequisite: Permission of instructor

LEGL 229 Certified Legal Assistants Exam Review (On Demand) 2 credits

This course is designed as a review course for the student/graduate wishing to take the Certified Legal Assistant Exam. It will examine all areas of procedural and substantive law included on the CLA exam as well as the ethics section of the test. Students taking the course must successfully pass a mock CLA exam to complete the course.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: LEGL 228

Lab fee: \$10.00

LEGL 230 Special Problems in Legal Assisting (On Demand) 2 credits

This course is a special topics course designed to allow the student to research and develop an understanding of legal assisting issues unique to the interests of the student and for which there is no other course available, the content of which will address such issues. This course is offered on an independent study basis only.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: Permission of chairperson

LEGL 232 Taxation (W, SP) 3 credits

Fundamentals of state, local and federal tax laws. The agencies and tribunals involved in tax matters will be examined. Specific research strategies and document preparation relative to tax issues are explored.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 234 Litigation II (W) 3 credits

Building on the knowledge gained in Litigation I, students will examine the role of the attorney in the trial process, case preparation and organization of materials for trial. Students will prepare a hypothetical case for trial.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: LEGL 205

Lab fee: \$5.00

LEGL 236 Probate Law II (On Demand) 3 credits

The law of guardianship and trusts with emphasis on guardianship administration, land sales and trust accounting.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 224

Lab fee: \$5.00

LEGL 238 Insurance Law (W, SU) 3 credits

An introduction to insurance law. The course will include principles of indemnity, interests protected, the transfer of risk and claims processes.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 101

Lab fee: \$5.00

LEGL 240 Professional Malpractice (W) 3 credits

An examination of the law of malpractice with an emphasis on malpractice in health professions and an examination of risk management methods in health care. The course will focus on informed consent, vicarious liability of health professionals and health care facilities, negligence, the doctrine of *res ipsa loquitur*, mandatory arbitration, defenses, and medicolegal ethics.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 201

Lab fee: \$5.00

LEGL 243 Alternative Dispute Resolution Issues Seminar (A, SP, SU) 3 credits

This course is designed to examine legal, ethical, and policy issues that arise in the use of mediation, arbitration, minitrials, summary jury trial and conciliation and to help develop mediation skills.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 205

Lab fee: \$5.00

LEGL 244 Creditor Debtor Relations (W, SU) 3 credits

This course will ensure the student is aware of the respective rights of creditors and debtors. An introduction to the prelegal and legal procedures of debt collection.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 220

Lab fee: \$5.00

LEGL 248 Searching and Closing the Real Estate Title (On Demand) 4 credits

This course is designed to examine the process of real estate title searches, and to prepare the student, in detail, to perform commercial and residential real estate title closings.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

LEGL 250 Intellectual Property (On Demand) 4 credits

Because businesses spend millions of dollars to build consumer confidence in their product names and logos, this course explores the world of patents, trademarks, copyrights, trade secrets, registration and protection of these business assets. The course includes a review of federal laws and case law that cover these areas. It also includes issues relating to cyber law and the Internet. The student will consider the future implications for the business owner and the consumer regarding these very contemporary topics.

Lecture: 4 hours – Lab: 0 hours

LEGL 251 Computer Assisted Legal Research (A, W, SP, SU) 3 credits

A course designed to give the Legal Assisting student exposure to the ever expanding and utilized area of computer assisted research, an alternative to traditional, manual legal research. The student will be required to complete a series of projects within the different libraries of LEXIS in which the student will become proficient with the various uses and functions of electronic legal information retrieval.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: LEGL 111

Lab fee: \$25.00

LEGL 252 Survey of Advanced Legal Technology (W, SU) 2 credits

The course will introduce and provide the student with computer training in document management, litigation support, billing, the Internet and advanced computer assisted legal research. The student will be acquainted with Internet user groups where questions are asked and answered via e-mail and list servs. Legal software that supports legal administration, case management and internal network applications will be emphasized. The course will use CD-ROM, extensive computer lab sessions and each student will manage a complete case on an automated platform. The goals of the course will be to provide the student with certain computer competencies that go beyond the basics and allow them to be proactive in the use of technology while at the same time utilizing creative thinking skills.

Lecture: 2 hours – Lab: 1 hours

Prerequisite: LEGL 112, LEGL 251 or by permission of chairperson

Lab fee: \$25.00

LEGL 253 Intellectual Property (W) 4 credits

The course is a comprehensive examination of the law related to the field of intellectual property, federal and state statutes and regulations, and the registration and protection process for intellectual property.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: ENGL 101, CIT 101

LEGL 255 Introduction to Workers' Compensation Law (A, SP) 4 credits

This course is an introduction to the Bureau of Workers' Compensation. The focus of the course is the structure of the bureau, with an emphasis on the purpose of the agency, the hierarchy, the authority under which it operates, and basic concepts of workers' compensation benefits.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of instructor

Lab fee: \$5.00

LEGL 256 Introduction to BWC Claims Processing (A, SP) 4 credits

This course is designed to acquaint the student with how the Bureau of Workers' Compensation process claims made including self-insured of state fund (BWC) claims, the calculation of wages and compensation, payment of medical bills, authorization of medical treatment, as well as how the bureau addresses motions made, application to reactivate, and permanent partial disability settlements, from injury to resolution.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of instructor

Lab fee: \$5.00

LEGL 257 Workers' Compensation Adjudication (A, SP) 4 credits

This course is designed to acquaint the student with how to deal with state agencies, in particular the Bureau of Workers' Compensation from the claimant position. The emphasis of this course is how to acquire information available through state files and computer systems. Violations of specific safety requirements, applications for permanent total disability and the hearing process will be examined.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of instructor

Lab fee: \$5.00

LEGL 258 Workers' Compensation Rating System (W, SU) 4 credits

This course is designed to acquaint the student with the different rating plans available through the Bureau of Workers' Compensation to establish appropriate premiums. The emphasis is on the underwriting process of the bureau.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of instructor

Lab fee: \$5.00

LEGL 259 Workers' Compensation Practice and Procedure (W, SU) 4 credits

This course is designed to acquaint the student with the procedures to complete the hearing process in a claim against the Bureau of Workers' Compensation, from both the bureau and claimant perspectives.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of instructor

Lab fee: \$5.00

LEGL 261 Business Law I (A, W, SP, SU,–DL) 3 credits

Survey of the legal framework of business, the nature of legal systems and the law, including contracts, criminal, and the law of torts.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$1.00

LEGL 262 Business Law II (A, W, SP, SU,–DL) 3 credits

A continuation of LEGL 261. Exploring the law of agency, corporation, partnerships, and property.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 261

Lab fee: \$1.00

LEGL 263 Business Law III (On Demand) 3 credits

An advanced examination of law as it pertains to business with emphasis on specialty areas of the law designed for the protection of business assets including the law of sales, commercial paper and secured transactions under the Uniform Commercial Code; debtor/creditor rights under the laws

of bankruptcy; and the use of wills, trusts and estate planning techniques for the protection and transfer of business interest.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LEGL 262

Lab fee: \$1.00

LEGL 264 Legal Environment of Business (A, W, SP, SU, –DL) 4 credits

An overview of the American legal system with an introduction to the legal concepts and principles that form its foundation. The course will examine the judicial system and methods of dispute resolution, while focusing on business crimes and torts, including product liability, ethics, contract formation and enforcement, consumer protection, employment law, environmental regulations, business organizations, particularly sole proprietorship, partnerships, and corporations. Students will be able to understand the legal ramifications of their business decisions.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$2.00

LEGL 265 Business Law for Accountants (A, W, SP, SU) 5 credits

An in-depth examination of business law as it applies to the accounting discipline with an emphasis on those topics directly relating to the Business Law section of the Certified Public Accountants Examination, including professional responsibility of the C.P.A.

Lecture: 4 hours – Lab: 2 hours

Lab fee: \$5.00

LEGL 266 Liability Issues in Health Occupations (On Demand)

3 credits

An examination of liability concerns in health occupations and of risk management methods in health care. The course will focus on informed consent, medical malpractice and vicarious liability issues.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: ENGL 101

Lab fee: \$5.00

LEGL 269 Consumer Law (On Demand)

4 credits

This course is an examination of the various state and federal statutes and regulations that govern the relationship of debtor and creditor. Statutes discussed include, but are not limited to, the Fair Debt Collection Act, Uniform Consumer Credit Code (UCCC) and Article 9 of the Uniform Commercial Code (UCC).

Lecture: 4 hours – Lab: 0 hours

Corequisite: LEGL 228 or by permission of Chairperson

Lab fee: \$5.00

LEGL 272 Mediation (W, SU)

4 credits

This course is an intensive overview of the mediation process. Students will study, in-depth, both statutory and private mediation processes. Students will review domestic relations mediation, employment fact-finding and labor mediation processes. Additionally, the student will learn the different models of mediation with particular emphasis on the Seven Step model. Each student will be involved in preparing and conducting several mediation role playing sessions as both mediator and participants. The fundamentals of researching arbitration decisions and legal resources in arbitration will be examined with special emphasis on Internet resources. Each student will conduct a mediation in class and prepare a mediation notebook as a final project.

Lecture: 4 hours – Lab: 4 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

LEGL 275 Overview of Bankruptcy Law and Practice (On Demand)

4 credits

This course is designed to acquaint the student with the statutory and regulatory structure, location and jurisdiction of bankruptcy law and bankruptcy courts and their nonjudicial officers. Parties and proceedings will be discussed as well as an overview of the bankruptcy chapters.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

LEGL 281 Social Security Practice and Procedure (On Demand)

4 credits

This course is designed to introduce the student to the origination of Social Security, its jurisdiction and regulation, and the practice and procedure within the Social Security Administration.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

LEGL 285 Estate Administration (On Demand)

4 credits

This course is designed to familiarize the student with the various methods of estate administration, including full administration of testate and intestate estates and the process of completing the same, including introduction to tax forms, and relief from administration.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

LEGL 287 Wills, Trusts and Powers of Attorney (On Demand)

5 credits

This course is an in-depth examination of the law relating to wills, trusts, and powers of attorney, the development and execution of the same, and the application of these probate tools to development and protection of estates.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

LEGL 291 Arbitration (On Demand)

4 credits

The course is an intensive overview of the arbitration process. Students will study in-depth both court annexed arbitration and private arbitration processes. The fundamentals of researching arbitration decisions and legal resources in arbitration will be examined with special emphasis on Internet resources. Each student will conduct an arbitration in class and prepare an arbitration notebook as a final project.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LEGL 228 or by permission of chairperson

Lab fee: \$5.00

Philosophy (PHIL)

PHIL 101 Introduction to Philosophy (A, W, SP, SU, –DL) 5 credits

An introduction to the problems, methods, and terminology of philosophy, the types of questions addressed by philosophers, and the pivotal thinkers and systems of Western civilization from the Greeks to the 20th century. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in philosophy and humanities.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

PHIL 130 Ethics (A, W, SP, SU, –DL)

5 credits

An introduction to moral reasoning, examining theories of right and wrong, good and bad, justice and injustice as they have been viewed in the past and as they shed light on contemporary ethical issues. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in philosophy and humanities.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

PHIL 150 Introduction to Logic (A, W, SP, SU,–DL) 5 credits

An introduction to critical thinking and the methods of inductive, deductive and symbolic logic. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in philosophy, humanities, and, in some instances, mathematics and science. Check with academic advisor.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

PHIL 250 Symbolic Logic (On Demand) 5 credits

A presentation of deductive logic focused on propositional logic, natural deduction and predicate logic. This course develops in greater detail principles of deductive logic covered in PHIL 150. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and distributive transfer requirements in philosophy, humanities, and in some cases, mathematics and sciences. Check with academic advisor.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$2.00

PHIL 270 Philosophy of Religion (On Demand) 5 credits

An introduction to the major issues in the philosophy of religion including the existence of God, faith and reason, the problem of evil, miracles, death and immortality, and God and morality. Meets elective requirements in the Associate of Arts and Associate of Science programs.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$2.00

PHIL 290 Capstone Experience in Philosophy (On Demand) 3 credits

A capstone course focusing on philosophy. Paradigms and their underlying assumptions will be explored. Students will work on developing research techniques and methodologies. Students will apply these techniques to a project of their own design, and participate in summative testing of their academic skills.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Open only to Associate of Arts and Associate of Science students preparing to graduate within 2 academic quarters.

Lab fee: \$2.00

PHIL 299 Special Topics in Philosophy 1 to 5 credits

Detailed examination of selected topics in philosophy.

Lecture: Variable hours – Lab: 0 hours

Prerequisite: Permission of instructor

Lab fee: \$2.00

Physics (PHYS)

Students must complete 60% of the laboratories to receive course credit. Courses in this area may require additional hours outside of the scheduled class time.

PHYS 100 Introduction to Physics (A, W, SP, SU,–DL) 4 credits

This course is a survey of the basic concepts of physics with emphasis on energy and its various forms. Topics include mechanics, heat, electricity, and waves, with related laboratory and demonstrations. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: MATH 102 or equivalent and placement into ENGL 100; not open to students with credit for PHYS 117, 118, 177, 178, 181, 182, 183, or 185

Lab fee: \$10.00

PHYS 106 Physics by Inquiry: Intro to Properties of Matter (On Demand) 5 credits

An introduction to experimental science and the properties of matter for undergraduates contemplating a teaching career. This course is intended for nonscience majors, especially for those pursuing degrees in education. The lab activities are designed to help students gain a better understanding of aspects of physical science.

Lecture: 4 hours – Lab 3 hours

Prerequisites: Placement into MATH 102 and ENGL 101 or higher

Lab fee: \$ 19.00

PHYS 117 College Physics (Mechanics and Heat) (A, W, SP, SU) 5 credits

A study of classical mechanics, including statics and kinematics, Newton's laws of motion, linear and angular momentum, work and energy, and properties of solids and fluids. Elementary concepts of heat are introduced, including temperature and thermal expansion, the ideal gas law, calorimetry, and heat transfer. Related laboratory and demonstrations. This course and PHYS 118 provide a two-quarter sequence in physical science that will fulfill the elective requirement for the Associate of Science Degree.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: MATH 148 or MATH 111 or equivalent, placement into ENGL 101. Not open to students with credit for PHYS 177 or 178

Lab fee: \$11.00

PHYS 118 College Physics (Electricity, Magnetism, and Light) (A, W, SP, SU) 5 credits

A continuation of PHYS 117. Topics in classical electricity and magnetism include electric potential, current and resistance, dc circuits, magnetic forces and fields, and electromagnetic induction. The nature of light is introduced and the principles of geometrical and physical optics, including optical instruments, are treated. Related laboratory and demonstrations.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: PHYS 117; not open to students with credit for PHYS 177, 178 or 179

Lab fee: \$10.00

PHYS 119 College Physics (Modern Physics) (A, W, SP) 5 credits

A continuation of PHYS 118. Topics include alternating current, electromagnetic waves, kinetic theory of gases, thermodynamics, and modern physics. The major emphasis of the course is on topics in modern physics, including special relativity, quantum mechanics, atomic and nuclear physics, nuclear radiation, and nuclear energy. Related laboratory and demonstrations.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: PHYS 118; not open to students with credit for PHYS 177, 178 or 179

Lab fee: \$10.00

PHYS 177 General Physics I (A, W, SP, SU,–DL) 5 credits

A course in the fundamental principles of mechanics for physics majors and engineers. Topics treated include vectors, equilibrium, kinematics and dynamics of a particle, energy, momentum, rotation, elasticity, simple harmonic motion, and the behavior of fluids. Related laboratory and demonstrations. This course and PHYS 178 provide a two-quarter sequence in physical science that will fulfill the elective requirement for the Associate of Science Degree. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: MATH 151, high school physics or PHYS 100 recommended and placement into ENGL 101

Lab fee: \$ 11.00

PHYS 178 General Physics II (A, W, SP, SU,–DL) 5 credits

A continuation of PHYS 177. Topics covered include Coulomb's law;

electric fields and potentials; capacitors and dielectrics; current and resistance; DC circuits; magnetic fields and forces; electromagnetic properties of matter; and AC circuits. Related laboratory and demonstrations. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisites: PHYS 177 and MATH 152

Lab fee: \$10.00

PHYS 179 General Physics III (A, W, SP, SU,–DL) 5 credits

A continuation of PHYS 178. Topics include mechanical waves, sound, electromagnetic waves, light, mirrors, lenses, interference, diffraction, polarization, relativity, photons, structure of atoms, nuclei, and solids. Related laboratory and demonstrations. Students enrolled in distance versions of this course will be required to come to campus for an orientation meeting, completion of certain exams and laboratories. Laboratories are generally done on an every other week basis on campus.

Lecture: 4 hours – Lab: 3 hours

Prerequisite: PHYS 178

Lab fee: \$10.00.

PHYS 181 Technical Physics (Mechanics) (A, W, SP, SU) 4 credits

A course in the basic principles of mechanics. Major topics include equilibrium or rigid bodies, particle motion, Newton's laws of motion, work and energy, conservation principles, and rotational motion. Related laboratory and demonstrations.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: MATH 111 or MATH 148 or equivalent and placement into ENGL 100; not open to students with credit for PHYS 117 or 177

Lab fee: \$10.00

PHYS 183 Technical Physics (Properties of Matter) (W, SU) 4 credits

A course in the basic principles associated with the mechanical and thermal properties of matter. Major topics include elasticity, fluid mechanics, heat and temperature, energy transformations, heat transfer, ideal and real gases, thermodynamics, vibrations and wave motion. Related laboratory and demonstrations.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: MATH 111 or MATH 148 or equivalent and placement into ENGL 100; not open to students with credit for PHYS 117 or 177

Lab fee: \$ 10.00

PHYS 185 Technical Physics (Heat, Light, Sound) (A, W, SP, SU) 4 credits

A course in the basic principles associated with heat, light, and acoustic phenomena. Major topics include temperature and heat, heat transfer, wave and particle nature of light, atomic theory, solid-state theory, electronics, and acoustics. Related laboratory and demonstrations.

Lecture: 3 hours – Lab: 3 hours

Prerequisites: MATH 112 or equivalent and placement into ENGL 100; not open to students with credit for PHYS 117 or 177

Lab fee: \$12.00

PHYS 290 Capstone Experience in Physics (On Demand) 3 credits

An integrated science course blending elements of chemistry, physics and biology. Topics include the historical development of the sciences, ethical issues in science and how they affect the advancement of scientific thought, and the scientific method as it relates to experimental design and interpretation of scientific results. The laboratory utilizes an investigative approach taking students through the process of identifying a research problem, conducting a literature review, writing a research proposal, collecting and analyzing data, writing a scientific paper and presenting results. This course is required for all physics majors seeking either the Associate of Arts or Associate of Science degree.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: 75 hours or more of course work completed with a minimum

of 20 credit hours within the sciences.

Lab fee: \$18.00

PHYS 293 Independent Study in Physics (On Demand) 1 to 5 credits

Detailed examination of selected topics of interest in physics.

Lecture: 1 to 5 hours – Lab: 0 to 6 hours

Prerequisite: Permission of instructor

Lab fee: Varies

PHYS 299 Special Topics in Physics (On Demand) 1 to 5 credits

Detailed examination of selected topics of interest in physics.

Lecture: 1 to 5 hours – Lab: 0 to 6 hours

Prerequisite: Permission of the instructor

Lab fee: Varies

Political Science (POLS)

Students who enroll in political science courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling a political science course.

POLS 101 Introduction to American Government (A, W, SP, SU,–DL) 5 credits

This course introduces students to the nature, purpose and structure of the American political system. Attention is given to the institutions and processes that create public policy. The strengths and weaknesses of the American political system are discussed, along with the role of citizens in a democracy. A distance-learning version of Introduction to American Government is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

POLS 165 Introduction to Politics (A, W, SP, SU) 5 credits

This course introduces students to the basic concepts and issues in the study of politics. The course compares various political institutions, ideologies, and economic systems; examines political socialization and culture; explores methods of resolving international conflict; and explains the impact of modern bureaucracies on policy-making.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

POLS 290 Capstone Experience in Political Science (On Demand) 3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have special interest in continuing a baccalaureate degree program in political science. The course presents a basic introduction to political science research methodologies that students apply in researching a social science topic of interest. Course requirements include the assembly of a portfolio that covers student's academic career at Columbus State Community College and participation in summative testing of their academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Completion of Associate of Arts and Associate of Science core requirements and at least 75 hours toward the degree and five credit hours in political science

306 Lab fee: \$5.00

POLS 293 Independent Study in Political Science (On Demand)

1 - 5 credits

An individual, student-structured course that examines a selected topic in political science through intensive reading or research. The independent study elective permits a student to pursue his/her interest within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisites: Permission of the instructor and the chairperson and one course in Political Science

Lab fee: \$5.00

POLS 299 Special Topics in Political Science (On Demand)

1 - 5 credits

A detailed examination of selected topics of interest in political science.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Varies

Lab fee: \$5.00

Practical Nursing (PNUR)

PNUR 100 Introduction to Practical Nursing (W, SU) 1 credit

The student is introduced to the role, responsibilities and the scope of practice for the practical nurse. The framework for the practical nursing curriculum is introduced, including the major concepts and threads.

Lecture: 1 hour

Prerequisite: Admission into the Practical Nursing Program

Lab fee: \$74.00

PNUR 101 Foundations of Practical Nursing (A, SP) 2 credits

This course expands on knowledge and application of the major concepts and threads of the curriculum. The student is introduced to the nursing process as it relates to practical nursing, critical thinking, culturally sensitive care, client safety, and communication skills. The use of the computer in health care and documentation will be introduced. Laboratory practice will assist the student to develop safe practice of basic nursing skills.

Lecture: 1 hour – Lab: 3 hours

Prerequisites: PNUR 100, ENG 101, BIO 261

Lab fee: \$60.00

PNUR 102 Introduction to Practical Nursing Concepts (W, SU)

6 credits

The practical nurse role in assessment/observation is presented with emphasis on observing the physical, psychosocial, and developmental components of adult and geriatric clients. Observation of the client's ability to adapt to stress is also explored. Practical nursing concepts related to nutritional health, fluid, electrolyte and acid/base balance, perioperative care, the infectious process, pain management, mental health, and end of life care will also be presented. Emphasis will be placed on the practical nurse's use of the nursing process to promote, maintain, and/or restore health. Students will practice assessment/observational skills and basic nursing skills in the laboratory. Clinical experience will be in adult and/or geriatric settings. Lab hours include the total number of hours for lab and clinical.

Lecture: 3 hours – Lab: 3 hours; Clinical 6 hours.

Prerequisites: PNUR 101, BIO 262

Lab fee: \$100.00

PNUR 103 Practical Nursing Concepts Related to Health Promotion, Maintenance, and Restoration (W, SU) 6 credits

The student will be introduced to commonly occurring alterations of the body systems. The course focuses on application of the nursing process by the practical nurse to promote, maintain, and restore health of clients experiencing alterations in functioning of the body systems. The goal of care is to promote use of self-care activities to assist clients in attaining an

optimal level of health. Skills learned in the skills laboratory will consist of nursing interventions that assist clients in achieving optimal health of the body systems. Clinical experiences will be conducted in a variety of adult, acute health care facilities. Lab hours include the total number of hours for lab and clinical.

Lecture: 3 hours – Lab: 3 hours; Clinical: 6 hours.

Prerequisites: PNUR 102, PNUR 122

Lab fee: \$103.00

PNUR 104 Practical Nursing Concepts Related to Maternal and Child Health (A, SP) 6 credits

The student will continue to apply the practical nursing concepts from previous courses to the care of women and children. Health promotion through the antepartal, intrapartal, and postpartal stages of pregnancy will be a focus. Complications occurring during pregnancy will be presented. Issues related to promotion of health of women and normal growth and development of the child will be discussed. Information on common health alterations of the child from the newborn through adolescence will be included. Students will perform those nursing skills in the laboratory that relate to care of maternal and pediatric clients. Clinical experiences will be provided in a variety of obstetrical and pediatric settings. Lab hours include the total number of hours for lab and clinical.

Lecture: 3 hours – Lab: 3 hours; Clinical: 6 hours

Prerequisites: PNUR 103, SSCI 101

Lab fee: \$73.00

PNUR 105 Concepts Related to Practical Nursing Practice (A, SP) 5 credits

The student is introduced to the concepts of leadership and management that enable the practical nurse to care for groups of clients. The clinical experience provides for practicum in which the student can apply these concepts while caring for a typical assignment of clients for a practical nurse while under the supervision of a registered nurse. In addition, content will be presented on caring for clients in emergency situations and in community based health care facilities. To enhance knowledge of continuity of care and the role of the practical nurse in the community, students will have an observation experience in a community healthcare setting. The final content in the course focuses on the transition of the student into the practice of practical nursing with information about the NCLEX-PN and application for licensure. Lab hours include the total number of hours for seminar and practicum.

Lecture: 2 hours – Seminar: 1 hour; Practicum: 16 hours

Prerequisites: PNUR 104, COMM 110

Lab fee: \$115.00

PNUR 121 Pharmacology I for the Practical Nurse (A, SP) 2 credits

This is the first of two courses where the focus will be on the practical nurse's role in medication administration to persons of all ages. Basic concepts, dosage calculations, drug classifications, and nursing implications will be presented for analgesic medications, integumentary system medications, gastrointestinal medications, and self-care preparations. Safe administration and documentation of oral, topical, and injectable medications will be presented in the laboratory setting.

Lecture: 1 hour – Lab: 3 hours

Prerequisites: Admission into Practical Nurse Program, MATH 100, BIO 261

Lab fee: \$58.00

PNUR 122 Pharmacology II for the Practical Nurse (W, SU) 3 credits

This is the second of two courses where the focus will be on the practical nurse's role in medication administration to persons of all ages. Dosage calculations, drug classifications, and nursing implications will be presented for the reproductive system medications, respiratory system medications, cardiovascular system medications, endocrine system medications, nervous system medications, immune system medications, sensory system medications, and hematological system medications. Safe administration and documentation of oral, topical, and injectable medications will be presented in the laboratory setting.

Lecture: 2 hours – Lab: 3 hours
Prerequisites: PNUR 121, BIO 262
Lab fee: \$88.00

PNUR 190 Special Topics in Practical Nursing 1 credit

The student will examine current topics and issues as they relate to practical nursing practice and roles.

Lecture: 1 hour
Prerequisites: PNUR 101

Psychology (PSY)

Students who enroll in psychology courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling a psychology course.

Note: Courses taught at a distance (Distance Learning [DL]) may have a higher lab fee than traditionally taught courses.

PSY 100 Introduction to Psychology (A, W, SP, SU,–DL) 5 credits

This introductory course provides an overview of the origins, growth, content and applications of psychology, including the application of the scientific method to the following topics: research methodology; beginning statistics; theories of physical, cognitive, moral and emotional development; sensation; perception; learning; motivation; intelligence; memory; personality; coping processes; abnormality; adjustment; and the individual in small groups and a pluralistic society. In addition to traditional classes, students have the option of taking a Web-based version or a video-based version (telecourse) of the course. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Students who take the video-based version (telecourse) may view the one-half hour video segments of the course on the Educable channel, at the College library, or rent copies of the videotapes. Course content in distance learning courses is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101

Lab fee: \$5.00
Telecourse lab fee: \$25.00

PSY 135 Psychology of Adjustment (A, W, SP, SU) 3 credits

This course examines psychological factors that influence individual growth, development, and behavior. Current theoretical approaches to understanding and achieving self-awareness, application of conditioning and motivation techniques to behavior modification, group dynamics, methods of self-help, and methods of improving interpersonal communications and relationships are investigated.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

PSY 200 Educational Psychology (A, W, SP, SU,–DL) 5 credits

This course offers students interested in becoming teachers an opportunity to consider practical, education-related applications of basic introductory psychology concepts. Teaching and learning topics include effective teaching skills; classroom management; the cognitive, social, and emotional development of learners; learner diversity; teacher- and student-centered instructional approaches; assessment of student learning; learning theories; creating optimal learning environments; student motivation; and the technology revolution in education. Methods may include interactive small group work, team presentations, educator communication skill building exercises, and computer lab experiences, including beginning training to use educational databases and Microsoft PowerPoint software. A distance-learning version of Educational Psychology is available. Students taking

the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 201 Field Based Experience in Educational Psychology (On Demand) 1 to 3 credits

An independent study course that offers teaching aides and other employed, screened, and insured individuals who work in the schools an opportunity to reflect in writing and in discussion on the learning and teaching theories and practices studied in Educational Psychology 200. Twelve hours of observation/work in the schools are required each week for 10 weeks for each hour of credit earned. Only students who have successfully completed Educational Psychology 200 or who are currently enrolled in PSY200 may take PSY201. Each student meets face to face a minimum of four times per quarter with his or her course instructor.

Lecture: 0 hours – Lab: 0 hours – Field Experience: 12 hours per credit hour

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Corequisite: PSY 200

Lab fee: \$5.00

PSY 230 Abnormal Psychology (A, W, SP, SU,–DL) 5 credits

Abnormal Psychology presents the basic concepts of abnormalities as defined by the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). The course focuses on classification schemes of diagnoses and looks at descriptive terms and symptoms. Research, major perspectives, and myths in the field of mental health are examined. A distance-learning version of Abnormal Psychology is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 240 Human Growth and Development Through the Life Span (A, W, SP, SU,–DL) 4 credits

This course surveys developmental change from conception to death. The following stages of human growth and development are covered: conception and prenatal growth, infancy, childhood, adolescence, young adulthood, middle age, old age, and death. This course focuses on physical, social, emotional and cognitive development. A distance-learning version of Human Growth and Development Through the Life Span is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail account, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 245 Children with Exceptionalities (A, SP) 5 credits

This course is an introductory course that offers teachers, teaching assistants, and students interested in becoming teachers an opportunity to study both the characteristics of children with special needs and the educational practices and programs that work to meet these learners’ needs in inclusive settings. Course topics include causes, prevalence, and assessment

of specific exceptionalities; historic and current theories, issues, trends, legal rights, and responsibilities in special education; student placement and service options; teaching strategies, modifications, and accommodations; classroom organization and management; and professional and home-school collaboration for lifelong learning.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 251 Adolescent Psychology (A, W, SP, SU,–DL) 5 credits

This course examines human development from puberty to young adulthood from a variety of perspectives. The course emphasizes the physical, cognitive, moral, identity, and career development of adolescents in contemporary society. Although the emphasis is on major theories of development and the normal development sequence, problems arising at this stage and means of dealing with these problems will be addressed. Topics to be covered include education, academic performance, and cognitive development; variations in physical and sexual maturation; social, emotional, and moral development; parent-child relationships; identity and self-image; work and leisure behavior; and transition to adulthood and independence. A distance-learning version of Adolescent Psychology is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail account, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 261 Introduction to Child Development (A, W, SP, SU,–DL) 5 credits

This course examines the nature, nurture, and development of children from conception through middle childhood. The traditional child development approach is used with emphasis upon physical, cognitive, social, emotional, and language development. Observation of children is an integral part of the course. A distance-learning version of Introduction to Child Development is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 267 Social Psychology (A, W, SP, SU) 5 credits

This course provides an overview of the origins, growth, content, and interaction of individuals in social settings, including the application of the scientific method and cultural influence to the following topics: attitudes and attitude change, attribution, social identity (self and gender), social perception (understanding others), social cognition (thinking about others and their social environment), prejudice and discrimination, nonverbal communication, obedience to authority, conformity, aggression, prosocial behavior, interpersonal attraction, and behavior in groups.

Lecture: 5 hours – Lab: 0 hours

Prerequisites: Grade of “C” or better in PSY 100 and placement into ENGL 101

Lab fee: \$5.00

PSY 290 Capstone Experience in Psychology (On Demand) 3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have a special interest in continuing a baccalaureate degree program in psychology. The course presents a basic introduction to psychology research that students apply in researching a

social science topic of interest. Course requirements include the assembly of a portfolio that covers student’s academic career at Columbus State Community College and participation in summative testing of academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: Completion of Associate of Arts or Associate of Science core requirements, at least 75 hours toward the degree, and five credit hours in Psychology

Lab fee: \$5.00

PSY 293 Independent Study in Psychology (On Demand) 1 - 5 credits

An individual, student-structured course that examines a selected topic in psychology through intensive reading or research. The independent study elective permits a student to pursue his/her interests within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisites: Permission of the instructor and the chairperson and one course in Psychology

Lab fee: \$5.00

PSY 299 Special Topics in Psychology (On Demand) 1 - 5 credits

A detailed examination of selected topics of interest in psychology.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Varies

Lab fee: \$5.00

Quality Assurance Technology (QUAL)

For Statistical Process Control, see MECH 244 in the Mechanical Engineering Technology course descriptions. For other related course descriptions, see Electronic Engineering Technology and Mechanical Engineering Technology.

QUAL 150 Quality Transformation (A, SU) 4 credits

This course focuses on teamwork and the applications of Total Quality Transformation “tools”. Teams of students and employees from business and industry solve existing quality problems in their organization with careful direction.

Lecture: 3 hours – Lab: 2 hours

QUAL 240 Total Quality Management (A, W) 3 credits

This course is a study and practice of the major elements and concepts of total quality management, including principles and styles of quality management, systems thinking, continuous improvement, management by data, and historic influences of leaders in quality management.

Lecture: 2 hours – Lab: 2 hours

QUAL 250 Metrology (SP) 3 credits

Making precise measurements is an important part of producing quality products for the customer. This introductory course covers the correct procedures for the linear and angular measures of features or attributes on machine components. Traceability to standards is also presented and instrument capability discussed. Students use a variety of instruments and systems to make precision measurements.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$10.00

QUAL 251 Value Engineering (W) 3 credits

Value engineering is the systematic application of recognized techniques which identify the function of a product or service, establish a monetary value for that function, and provide the necessary function reliably at the lower overall cost. Students will be introduced to value engineering concepts and applications for the practitioner.

Lecture: 2 hours – Lab: 2 hours
Prerequisite: MECH 244

QUAL 260 Reliability and Systems Maintainability (SP) 3 credits
This course is an examination of the basic methods that companies use to ensure the reliability of their products. Students learn statistical methods used to determine reliability, the effectiveness of data analysis, use of simulations, and ways to improve system performance.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: MECH 244

QUAL 261 Technical Project Management (SP) 3 credits
Course provides an integration of the elements involved in planning, developing, and managing a successful and efficient technical project. Several methods are used including current software and Gantt charts.
Lecture: 2 hours – Lab: 2 hours

Radiography (RAD)

RAD 100 Health & Safety Guidelines for Allied Health Students (W, SU) 1 credit
This course introduces students to the Federal Regulation Guidelines and Health/Safety Instructions for students entering any program in the Allied Health Department
Lecture: 1 hour – Lab: 0 hours

RAD 111 Introduction to Radiologic Technology (SU) 3 credits
Basic introduction to radiologic principles and clinical radiography. Areas of emphasis include fundamentals of radiobiologic concepts, medical ethics, body mechanics, patient care skills, and clinical observation. This course is a prerequisite for all other radiologic technology courses.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: Completed health record, and acceptance into program.
Lab fee: \$30.00

RAD 113 Radiologic Science (W) 5 credits
The course begins with a review of basic concepts of electricity, electromagnetism, and electrical circuits. The student is then introduced to the theory of x-ray production, x-ray emissions, and x-ray interactions. Applications of equipment are discussed to include special x-ray equipment such as tomography, stereoradiography, mammography, and fluoroscopy.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: RAD 111

RAD 118 Radiographic Exposure and Processing (SP) 5 credits
This course consists of a study of film processing through analysis of radiographic film characteristics, film processing, film storage and handling, and silver recovery methods. Photographic and geometric properties necessary to the production of a quality radiograph are discussed, as well as technical conversions necessary to maintain film density.
Lecture: 4 hours – Lab: 2 hours
Prerequisite: RAD 113
Lab fee: \$44.00

RAD 123 Advanced Exposure and Processing (W) 4 credits
This advanced course analyzes factors which affect the diagnostic quality of the radiograph. Technique charts are developed. The importance of a quality assurance program is emphasized and quality control testing is presented. Students are required to conduct quality control testing and troubleshooting of radiographic equipment.
Lecture: 3 hours – Lab: 2 hours
Prerequisite: RAD 118
Lab fee: \$49.00

RAD 126 Radiation Biology and Protection (A) 3 credits
This advanced science course examines human responses to ionizing radiation. Early and late effects of radiation exposure are discussed, as well as an in-depth analysis of radiation protection standards and practices.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: RAD 113
Lab fee: \$30.00

RAD 141 Radiographic Procedures I (SU) 4 credits
The student is introduced to radiologic terms specific to imaging, equipment operation, and patient positioning. Specific areas of study include physician assisting, and radiographic anatomy to include gastrointestinal system, upper and lower extremities, chest, abdomen, and basic urography. Lab provides the opportunity for practice and demonstration of proficiency.
Lecture: 3 hours – Lab: 3 hours
Prerequisite: Acceptance into the program
Lab fee: \$61.00

RAD 141A Intro to Radiography Equipment and Patient Care (Quarter offered to be determined) 0.5 credit
This is a module of 141, which introduces the student to radiography equipment and patient care.
Prerequisites: BIO 100, MULT 101, ENGL 101
Lab: 1 hour
Lab fee: 20.00

RAD 141B Radiographic Positioning of the Upper Extremities (Quarter offered to be determined) 1 credit
This is a module of RAD 141 This module introduces the student to radiographic positioning of the upper extremities.
Prerequisites: BIO 100, MULT 101, ENGL 101
Lecture: 0.5 hours
Lab: 1 hour
Lab Fee: 20.00

RAD 141C Radiographic Positioning of the Lower Extremities (Quarter offered to be determined) 1 credit
This is a module of RAD 141. This module introduces the student to radiographic positioning of the lower extremities
Prerequisites: BIO 100, MULT 101, ENGL 101
Lecture: 0.5 hours
Lab: 1 hour
Lab Fee: 20.00

RAD 141D Radiographic Positioning for Podiatry (Quarter offered to be determined) 0.5 credit
This is a module of RAD 141. This module introduces the student to radiographic positioning for Podiatry.
Prerequisites: BIO 100, MULT 101, ENGL 101
Lab 1.0 hours
Lab Fee: 20.00

RAD 142 Radiographic Procedures II (A) 4 credits
This course serves as a continuation of RAD 141, with progression through the positioning categories and radiographic anatomy. Course topics include basic fluoroscopic procedures, the vertebral column, bony thorax, specialized biliary and urographic studies, and tomography.
Lecture: 3 hours – Lab: 3 hours
Prerequisite: RAD 141
Lab fee: \$61.00

RAD 142A Radiographic Positioning of the Chest and Abdomen (Quarter offered to be determined) 1 credit
This is a module of RAD 142. This module introduces the student to radiographic positioning of the Chest and Abdomen.
Prerequisite: BIO 100, MULT 101, ENGL 101

Lecture: 0.5 hours
Lab: 1 hour
Lab Fee: 20.00

RAD 142B Radiographic Positioning of the Spine and Skull (Quarter offered to be determined) 0.5 credit

This is a module of RAD 142. This module introduces the student to radiographic positioning of the Chest and Abdomen.
Prerequisite: BIO 100, MULT 101, ENGL 101
Lab: 1 hour
Lab Fee: 20.00

RAD 143 Radiographic Procedures III (W) 4 credits

This course serves as the final of a series of three, with progression through the remaining categories of positioning and radiographic anatomy. Course topics include specialized fluoroscopic and radiographic studies, skull and facial bones, operative radiography, and trauma radiography.
Lecture: 3 hours – Lab: 3 hours
Prerequisite: RAD 142
Lab fee: \$61.00

RAD 148 Special Radiographic Procedures (SP) 4 credits

This course provides a detailed examination of cardiovascular, neurologic, interventional radiologic studies and common specialized procedures. The course begins with discussion of specialized equipment and materials. Emphasis is placed on pertinent anatomy, diagnostic value and/or therapeutic value of each examination.
Lecture: 3 hours – Lab: 2 hours
Prerequisite: RAD 143
Lab fee: \$5.00

RAD 190 Radiation Protection for General Machine Operators (A, W, SP, SU) 2 credits

This course is designed to prepare non-radiographers with a specific background in radiation protection and radiation biology necessary to be eligible to apply for the State of Ohio, Radiology Technology Division, General Operator Examination. Areas of instruction include radiation physics, radiographic technique, darkroom processing and film handling, radiation health, safety and protection and radiation biology. Basic radiographic positioning skills and terminology are also presented.
Lecture 2 hours – Lab: 0 hours
Prerequisite: Admission to the program
Lab Fee: \$3.00

RAD 212 Sectional Anatomy (A) 3 credits

Sectional anatomy is introduced, with an emphasis on head, chest, abdomen and pelvis. Students will be required to give a presentation demonstrating correlations between different sectional imaging modalities.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: RAD 143
Lab fee: \$3.00

RAD 222 Computerized Imaging (A) 1 credit

This course presents a survey of computerized modalities related to radiography to include an introduction to computers in medical imaging, digital radiography, computed tomography, magnetic resonance imaging, positron emission tomography and Picture Archival and Communication Systems (PACS).
Lecture: 1 hour – Lab: 0 hours
Prerequisite: RAD 113
Lab fee: \$3.00

RAD 231 Radiographic Pathology (W) 3 credits

The course begins with a review of common terms relating to pathology. Using a survey approach, this course continues with a study of various disease processes and their effect on body systems as they relate to radiography and allied imaging modalities. Students are required to write a term paper on a specific pathologic process.

Lecture: 3 hours – Lab: 0 hours
Prerequisite: RAD 148
Lab fee: \$3.00

RAD 254 Seminar I (SU) 1 credit

Evaluation and review of radiography cases and discussion of current issues in the radiologic sciences.
Lecture: 1 hour – Lab: 0 hours
Corequisite: RAD 264

RAD 255 Seminar II (A) 1 credit

Evaluation and review of radiography cases and discussion of current issues in the radiologic sciences.
Lecture: 1 hour – Lab: 0 hours
Corequisite: RAD 265

RAD 256 Seminar III (W) 3 credits

Evaluation and review of radiography cases and discussion of current issues in the radiologic sciences.
Lecture: 3 hour – Lab: 0 hours
Prerequisite: RAD 255
Corequisite: RAD 266

RAD 257 Seminar IV (SP) 1 credit

Evaluation and review of radiography cases and discussion of current issues in the radiologic sciences. This summative course also reviews all program requirements. This is an elective course.
Lecture: 1 hour – Lab: 0 hours

RAD 261 Clinical I (A) 2 credits

This directed practice in the clinical area provides the opportunity for the student to become familiar with the care and positioning of the patient. Proficiency requirements are completed using a competency-based educational format over the course material presented in Radiologic Procedures I. Film critique is incorporated to provide a correlation of all factors that comprise a finished radiograph to include an analysis of anatomic structures, patient positioning, radiation protection, and fundamental exposure techniques.
Lecture: 0 - Lab: 16 hours
Prerequisite: RAD 111
Lab fee: \$31.00

RAD 262 Clinical II (W) 2 credits

This directed practice in the clinical area provides the practical experience necessary to function as a radiographer and is designed to enhance and complement didactic studies. Experience is gained in the general diagnostic and fluoroscopic areas, the emergency department, and on portable radiography rotations. Film critique is continued to provide a correlation of all factors that comprise a finished radiograph. Case presentations are introduced.
Lecture: 1 hour – Lab: 16 hours
Prerequisite: RAD 261
Lab fee: \$31.00

RAD 263 Clinical III (SP) 2 credits

This directed practice in the clinical area is a continuation of Clinical II. Clinical III provides the practical experience necessary to function as a radiographer and is designed to complement and enhance the didactic studies. Experience is gained in the general diagnostic and fluoroscopic areas, the emergency department, the operating room, tomography, portable radiography, and digital imaging. Film critique and case presentations are continued.
Lab: 16 hours
Prerequisite: RAD 262
Lab fee: \$31.00

RAD 264 Clinical IV (SU) 3 credits

This directed practice in the clinical area is a continuation of Clinical III.

Clinical IV provides the practical experience necessary to function as a radiographer and is designed to enhance and complement the didactic studies. Experience is gained in the general diagnostic and fluoroscopic areas, the emergency department, the operating room, tomography, portable radiography, the computed tomographic area, to include an evening rotation. In addition, each student is required to observe a radiologist during film reading and dictation. Film critique and case presentations are continued.

Lab: 24 hours

Prerequisite: RAD 263

Corequisite: RAD 254

Lab fee: \$18.00

RAD 265 Clinical V (A)

3 credits

This directed practice in the clinical area is a continuation of Clinical IV. Clinical V provides the practical experience necessary to function as a radiographer and is designed to enhance and complement didactic studies. Experience is gained in the general radiographic and fluoroscopic areas, emergency department, operating room, portable radiography, tomography, computed tomography, cardiovascular and interventional radiology, digital imaging and special area (one day) rotations in nuclear medicine, radiation oncology, diagnostic medical sonography, cardiac catheterization laboratory, and extra-corporeal shock wave lithotripsy. Film critique and case presentations are continued.

Lab: 24 hours

Prerequisite: RAD 264

Corequisite: RAD 255

Lab fee: \$31.00

RAD 266 Clinical VI (W)

3 credits

This directed practice in the clinical area is a continuation of Clinical V. Clinical VI provides the practical experience necessary to function as a radiographer. Experience is obtained in general radiographic and fluoroscopic areas, the emergency room, the operating room, tomography, mammography, portable radiography, digital imaging, computed tomography, and magnetic resonance imaging. Film critique and case presentations are continued.

Lab: 24 hours

Prerequisite: RAD 265

Corequisite: RAD 256

Lab fee: \$31.00

RAD 267 Clinical VII (SP)

3 credits

This directed practice in the clinical area is a continuation of Clinical VI. Students are required to complete the Final Competency Examination during this quarter. Clinical rotations are scheduled in the general radiographic and fluoroscopic areas, the operating room, the emergency room, mammography, and computed tomography. Once the Final Competency Examination has been satisfactorily completed, the student may custom design individual specific clinical rotations. Critique and case presentations are continued.

Lab: 24 hours

Prerequisite: RAD 266

Corequisite: RAD 257

Lab fee: \$31.00

Real Estate (REAL)

REAL 101 Real Estate Principles and Practices (A, W, SP, SU)

4 credits

An introduction to the language of real estate, the economics of the real estate business and the general practices performed in the listing and selling of real estate. Provides a basic knowledge of the real estate business. Course covers the physical, legal, locational and economic characteristics of real estate, real estate markets, regional and local economic influences on real estate values, evaluation, financing, licensing and professional

ethics. Meets all state requirements for licensing.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$3.00

REAL 102 Real Estate Law (A, W, SP, SU)

4 credits

Real estate law includes all of the areas of law of common concern to the typical real estate practitioner and investor-consumer. Among topics covered are the law of agency as applied to real estate brokers and salespersons, law of fixtures, freehold and leasehold, estates, conveyance of real estate, real estate managers, licensure laws of Ohio, zoning, cooperatives and condominiums. Meets state requirements for licensing.

Lecture: 4 hours – Lab: 0 hours

Lab fee: \$3.00

REAL 111 Real Estate Finance (A, W, SP, SU)

2 credits

Covers four major concerns of real estate financing: financing instruments and creative financing techniques; in-depth mortgage payment patterns and concepts, economic characteristics and standards, and financing of single and income-producing properties; sources and availability of mortgage money and credit and the impact of various factors on the mortgage market; and special government activities having an impact on real estate financing. Meets requirements for licensing.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$3.00

REAL 112 Real Estate Appraisal (A, W, SP, SU)

2 credits

Stresses the methodology of appraising the single-family residential property and the theory underlying appraisal techniques. Course covers the three basic techniques of appraising: market comparison, penalized cost of replacement, and income approach (GMRM). A term appraisal project is assigned to give the student practical experience in applying these techniques. Meets state requirements for licensing.

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$3.00

REAL 121 Residential Sales Practices (SP)

3 credits

A “how to” course providing a step-by-step approach for success as a real estate professional based on sound principles and acceptable techniques. Course sets forth basic fundamentals which must be mastered by real estate practitioners regardless of their specialization or type of property involved. Underlying theme is communication. See advisor to find out if course may meet continuing education requirement.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: REAL 101 and REAL 102 or Real Estate License.

Lab fee: \$3.00

REAL 221 Professional Property Management (SP)

3 credits

A course studying decision-making as it affects management of residential, commercial and industrial property. The emphasis shall be on the practical application of theory to actual management problems. Specific topics include Ohio Tenant Landlord Act, forcible entry and detainer, typical leases, office management, hiring, merchandising, advertising, collection problems, taxes, insurance and maintenance. See advisor to find out if course may meet continuing education requirement.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: REAL 101

Lab fee: \$3.00

REAL 240 Introduction to Entrepreneurship (A, W, SP, SU, –DL)

3 credits

This course represents the state-of-the-art in next-generation education using national business experts and timely documentary footage to create a course rich in content and compelling presentation. Its documentary case studies range from international franchising operations and high-technology companies to smaller, niche-oriented ventures and fledgling businesses still trying to raise start-up capital.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$3.00

REAL 270 Real Estate Investing (A, W, SP) 3 credits

This course offers a practical approach to understanding the steps necessary to purchase real property as part of an investment portfolio. Student will use case studies to develop investment plans that achieve financial wealth through real property investment. Investment property will include single family, multi family, and small commercial ventures. It is recommended that the student be familiar with Excel spreadsheets or similar software.
Lecture: 3.0 hours – Lab: 0 hours
Lab fee: \$ 3.00

REAL 275 Repair, Restore, Remodel (A, W, SP) 3 credits

This course is based on proven techniques used to repair, restore or remodel property that is functionally obsolete. Course is structured to teach basic hand tool and power tool use and safety. Several labs will be conducted with hands-on activities. Part of the course will help students understand the basic techniques in restoration of circa properties. These techniques will involve a beginning study of architectural style and design based upon property's age. The final part of the course will analyze what type of remodeling is economically feasible verses those remodeling projects that are not feasible.
Lecture: 3.0 hours – Lab 0 hours
Lab fee: \$3.00

REAL 290 Post Licensure Sales Course (A, W, SP, SU) 1 credit

Mandatory 10-hour post licensure course for real estate salespersons. Course covers the housing market today; future trends impacting real estate markets; license law matters; legal matters; environmental concerns; real estate specialties; the image of real estate licensees; and finance, taxes, and legislation.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$3.00

REAL 291 Post Licensure Brokers Course (On Demand) 1 credit

Mandatory 10-hour post licensure course for real estate brokers. Course covers the housing market today; future trends impacting real estate markets; license law matters; legal matters; environmental concerns; real estate specialties; the image of real estate licensees; and finance, taxes, and legislation.
Lecture: 1 hour – Lab: 0 hours
Lab fee: \$3.00

Respiratory Care (RESP)**RESP 100 Introduction to Respiratory Care (A) 5 credits**

This course presents an integrated introduction to the care of pulmonary patients. Course content will focus on the skills required and the methods used to manage cardiopulmonary problems.
Lecture: 3 hours – Lab: 4 hours
Prerequisite: Acceptance into the program
Corequisite: RESP 160
Lab fee: \$35.00

RESP 102 Respiratory Assistant (W, SP) 5 credits

This course is a prerequisite for admission to the Respiratory Care program. This course deals with cleaning, sterilization, assembly and making respiratory care equipment patient-ready. The content covered in this course would improve a student's opportunity for hospital employment as a respiratory care assistant.
Lecture: 3 hours – Lab: 4 hours
Prerequisite: None

RESP 114 Introduction to Pulmonary Disease (W) 4 credits

This course provides an integrated approach to the anatomy, physiology and pathology of the cardiopulmonary system. Normal and abnormal

function will be compared.

Lecture: 3 hours – Lab: 2 hours

Prerequisite: RESP 100 or permission of instructor

RESP 130 Patient Assessment I (SP) 2 credits

This course presents a holistic approach to assessment of adult and pediatric patient in the subacute/homecare setting. Special emphasis will be placed on assessment of the cardiopulmonary function.
Lecture: 1 hour – Lab: 2 hours
Prerequisite: RESP 114, RESP 150, or permission of instructor
Corequisites: RESP 152 and RESP 196

RESP 132 Patient Assessment II (SU) 2 credits

This course presents a holistic approach to assessment of adult and pediatric patients in the acute care setting. Special emphasis will be placed on assessment of the cardiopulmonary system.
Lecture: 1 hour – Lab: 2 hours
Prerequisite: RESP 130
Corequisites: RESP 154 and RESP 198

RESP 150 Introduction to Pharmacology (W) 2 credits

This course provides an introduction to the basic principles of therapeutic drug administration. Classification of drugs will be included. Special emphasis will be directed to safety issues, sources of drug information, and application to respiratory care practice.
Lecture: 2 hours – Lab: 0 hours
Prerequisite: RESP 100 or permission of instructor

RESP 152 Case Management I (SP) 2 credits

This course presents a holistic approach to the management of adult and pediatric patients in the subacute settings. Special emphasis will be placed on the management of the cardiopulmonary problems.
Lecture: 1 hour – Lab: 2 hours
Prerequisite: RESP 114, RESP 150 or permission of instructor
Co-requisite: RESP 130 and RESP 196

RESP 154 Case Management II (SU) 2 credits

This course presents a holistic approach to the management of adult and pediatric patients in the acute care setting. Special emphasis will be placed on the management of the cardiopulmonary problems.
Lecture: 1 hour – Lab: 2 hours
Prerequisite: RESP 152 or permission of instructor
Corequisites: RESP 132 and RESP 198

RESP 160 Introduction to Respiratory Equipment (A) 1 credit

This course is an introduction to basic respiratory care equipment.
Lecture: 0 hours – Lab: 2 hours
Prerequisite: Acceptance into the program

RESP 170 Mechanical Ventilators (W) 1 credit

Students will learn operational characteristics of critical care, home care, transport, and neonatal ventilators.
Lecture: 0 hours – Lab: 2 hours
Prerequisite: RESP 160 or permission of instructor

RESP 196 Clinical Practice/Therapeutic Procedures I (SP) 8 credits

This course is focused on conducting respiratory care procedures in the acute care and long-term acute care settings.
Lecture: 2 hours – Lab: 12 hours
Prerequisite: RESP 100 or permission of instructor
Co-requisite: RESP 130 and RESP 152
Lab fee: \$35.00

RESP 198 Clinical Practice/Therapeutic Procedures II (SU) 8 credits

This course is focused on conducting respiratory care procedures in the acute care setting.
Lecture: 2 hours – Lab: 12 hours

Prerequisite: RESP 196 or permission of instructor
Corequisites: RESP 132 and RESP 154
Lab fee: \$35.00

RESP 230 Patient Assessment III (A) 2 credits

This course presents a holistic approach to the assessment of adult and pediatric patient in the critical care setting. Special emphasis will be placed on assessment of the cardiopulmonary system.

Lecture: 1 hour – Lab: 2 hours

Prerequisite: RESP 132 or permission of instructor
Corequisites: RESP 256 and RESP 290

RESP 232 Neonatal and Pediatric Respiratory Care (W) 3 credits

This course offers a study of the management and treatment of neonatal and pediatric respiratory diseases. Special emphasis is placed on the therapeutic procedures of respiratory care which are associated with pediatric and neonatal patients.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Permission of instructor
Lab fee: \$20.00

RESP 238 Pulmonary Function (On Demand) 3 credits

A study of the equipment and the techniques utilized in pulmonary function testing and blood gas analysis. This course examines the types of analyzers used in performing lung volume tests, lung flow tests, and gas analysis test with a discussion of the advantages and disadvantages of such systems. Procedures used in each test are discussed including patient instruction and calculation of the data.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Permission of instructor

RESP 251 Respiratory Rehabilitation Home Care Techniques (On Demand) 3 credits

This course provides the student with the appropriate adaptations of skills and concepts traditionally used in the hospital to alternate care settings in order to educate the patient and caregiver to maintain the highest possible functional capacity. Included are medication regimens, smoking cessation, breathing retraining, bronchial hygiene, and other selfcare techniques. Other topics include monitoring the patient's disease and servicing the equipment needs of the patient.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Permission of instructor
Lab fee: \$15.00

RESP 252 Patient Management in Respiratory Rehabilitation (On Demand) 3 credits

The study of the patient's adaptation to chronic pulmonary disease. Emphasis will be placed on problem identification, appropriate interventions, and referral to community resources using a multidisciplinary approach in coordinating the various systems of care.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: RN, LPN, RRT, CRTT or permission of instructor

RESP 253 Respiratory Rehabilitation Home Care Administration (On Demand) 4 credits

This course concentrates on the management of a respiratory rehabilitation or home care organization. Topics include the development of policies and procedures for respiratory rehab home care services, the preparation of the certificate of medical necessity, and the documentation necessary for reimbursement, accreditation, regulatory requirements, and quality assurance. Other topics include marketing strategies and community health promotion.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: RN, LPN, RRT, CRTT, or permission of instructor

RESP 256 Case Management III (A) 2 credits

This course presents a holistic approach to the management of adult and pediatric patients in the critical care setting. Special emphasis will be

placed on the management of the cardiopulmonary problems.

Lecture: 1 hour – Lab: 2 hours

Prerequisite: RESP 154 or permission of instructor
Corequisites: RESP 230, RESP 290 and RESP XXX

RESP 270 Current Issues in Respiratory Care (A, W, SP, SU) 2 credits

This course is intended to be focused on current trends in the care of patient's with cardiopulmonary problems. Course content will change as current issues change.

Lecture: 2 hours

Prerequisite: RESP 290 or permission of instructor
Corequisite: RESP 292

RESP 280 Respiratory Care Seminar 2 (W) 2 credits

This course deals with special topics in respiratory care.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: RESP 256

Corequisite: RESP 292

Lab fee: \$60.00

RESP 290 Clinical Practice/Therapeutic Procedures III (A) 8 credits

This course focuses on conducting respiratory care procedures in the critical care setting.

Lecture: 2 hours – Lab: 12 hours

Prerequisite: RESP 198 or permission of instructor

Corequisites: RESP 230, RESP 256 and RESP XXX

Lab fee: \$35.00

RESP 292 Clinical Practice/Therapeutic Procedures IV (W) 8 credits

This course allows students to select a specialty area for additional clinical practice.

Lecture: 2 hours – Lab: 12 hours

Prerequisite: RESP 290 or permission of instructor

Co requisite: RESP 270

Lab fee: \$55.00

RESP 295 Clinical Experience (SP) 4 credits

In the clinical practicum, students apply skills that they have learned in the previous four quarters. Students spend 24 hours per week practicing respiratory care with a clinical affiliate.

Lecture: 1 hour – Lab: 24 hours

Prerequisite: RESP 292 or permission of instructor

Lab fee: \$30.00

RESP 221 Introduction to Sleep Problems (On Demand) 2 credits

This introductory course will provide an overview of the physiology and architecture of sleep, common sleep disorders, their prevalence in the population, causes and treatment, the factors related to risk and risk management for shift workers, and the role of the polysomnography laboratory in monitoring and recording physiologic data during sleep.

Prerequisite: This course is open to any interested student

Lecture: 2 hours – Lab: 0 hours

Lab fee: \$3.00

RESP 223 Level I Polysomnography Technician (On Demand) 2 credits

This course will prepare the student for performing Level I polysomnographic technician responsibilities in the clinical area, and will provide an introduction to polysomnography.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: RESP 221 or permission of RESP program coordinator

Lab fee: \$3.00

RESP 224 Level I Polysomnography Technician Clinical (On Demand) 2 credits

This course will prepare the student for performing Level I polysomnographic technician responsibilities in the clinical area. The student will complete a supervised clinical experience in a sleep lab under the guidance of a clinical preceptor. The course focuses on preparing

the equipment and instrumentation used in the sleep lab, as well as on patient preparation.

Lecture: 0 hours – Lab: 4 hours

Prerequisite: RESP 221 or permission of RESP program coordinator

Lab fee: \$3.00

RESP 225 Level II Polysomnography Technician (On Demand)

2 credits

The Level II Technician course is designed for nurses, respiratory therapists, paramedics and other health care practitioners who are interested in polysomnography. This course focuses on scoring of polysomnography tracings, applying and titrating CPAP/Bi-Level therapy, and patient education.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: RESP 223, RESP 224 or permission of RESP program coordinator

Lab fee: \$3.00

RESP 226 Level II Polysomnography Technician–Clinical (On Demand)

2 credits

The Level II Technician clinical course is designed to provide clinical practice for skills covered in the RESP 225.

Lecture: 0 hours – Lab: 4 hours

Prerequisite: RESP 223, RESP 224 or permission of RESP program coordinator

Lab fee: \$3.00

RESP 228 Polysomnography Current Topics (On Demand) 2 credits

This course will examine current changes in the field of polysomnography. Changes may include new techniques in instrumentation or diagnosis, and new approaches to sleep disorders or assessment.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: RESP 225, RESP 226 or permission of RESP program coordinator

Lab fee: \$3.00

Social Sciences (SSCI)

Students who enroll in interdisciplinary social science courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling an interdisciplinary social science course.

SSCI 100 Globalization: A Social Science Perspective (A, W, SP, SU,–DL)

5 credits

This course will survey the process of globalization through the social science disciplines. The impacts of the social, cultural, economic, and political contexts on society and organizations will be considered. Strategies for becoming effective negotiators and managers within a global economy will be explored. Students, working in teams, will research a particular organization of their choice and present a case study on the organization at the end of the quarter. This is a general education core course. A section with project/study time in Cuernavaca, Mexico, may be offered Winter quarter. A distance-learning version is also available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Group projects are maintained via virtual meetings and distance-learning students are required to take a proctored final examination at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

SSCI 101 Cultural Diversity (A, W, SP, SU,–DL)

5 credits

An interdisciplinary course that focuses on the cultural, psychological,

sociological, political, geographic, and economic diversity among various groups. Topics include the ways individual beliefs, social values, and political and economic systems affect our perspectives and life-styles. Through the use of team projects, students participate in interactive group work to explore the effects of social inequity on groups within society. The course emphasizes the development of critical thinking skills as applied to social science research and diversity issues that students may encounter in their lives. This is a general education core course. A condensed section taking place in the Southwestern United States may be offered Summer Quarter and a section with project/study time in Cuernavaca, Mexico, may be offered Winter Quarter. A distance-learning version of Cultural Diversity is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Group projects are maintained via virtual meetings and distance-learning students are required to take a proctored final examination at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

SSCI 102 Popular Culture (A, W, SP, SU,–DL)

5 credits

An interdisciplinary general education core course that examines the relationship between society and popular culture in the United States through topics including advertising, television, music, movies, art, sports and the Internet. The course analyzes these components of American popular culture and their connections to social, political, economic, and cultural influences from the latter half of the twentieth century to the present. Students will explore these changes in U.S. society through selected readings, written assignments, and group projects. A general education core course. A distance learning version of Popular Culture is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

SSCI 104 Human Economic Geography (A, W, SP, SU,–DL) 5 credits

An interdisciplinary, general education core course that provides a geographical examination of the world economy. Students research the factors affecting a country's socioeconomic development and present findings from a policy maker's perspective. Factors to be covered include location; demographic trends; resource availability and use patterns; industrialization; political and cultural forces; and global interdependence. A section with project/study time in Cuernavaca, Mexico may be offered Winter quarter.

A distance-learning version of World Economic Geography is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

SSCI 105 Law and Society (A, W, SP, SU)

5 credits

An interdisciplinary, general education core course that examines the interrelationships between law and other social structures and processes. The structure of the law, the origin of laws, the organization and function of the legal system, the impact of the law, and the relationship between law and social change will be examined.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

SSCI 287 Research Methods for the Social Sciences (A, W, SP, SU)
5 credits

This course is designed to provide students with an introduction to the major research techniques that are employed by social science researchers. The first half of the course focuses on the logic of research and research design and the procedures used for research design. The second half of the course deals more specifically with a variety of particular techniques used for gathering data. Students will be expected to apply each of the techniques covered in the course through a series of small exercises throughout the quarter. Students will write a research paper based on some of their findings.

Lecture: 3 hours – Lab 2 hours

Prerequisites: ENG 102 or ENG 111; MATH 104 or MATH 135; 10 hours of credit in the social sciences

Lab fee: \$5.00

SSCI 290 Capstone Experience in Social Sciences (On Demand)
3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have a special interest in continuing in a baccalaureate degree program in the social sciences. The course presents a basic introduction to social science research methodologies that students apply in researching a social science topic of interest. Course requirements include the assembly of a portfolio that covers student's academic career at Columbus State Community College and participation in summative testing of academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: Completion of Associate of Arts or Associate of Science core requirements and at least 75 hours toward the degree

Lab fee: \$5.00

SSCI 293 Independent Study in the Social Sciences (On Demand)
1 - 5 credits

An individual, student-structured course that examines a selected topic in the social sciences through intensive reading or research. The independent study elective permits a student to pursue his/her interests within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisites: Permission of the instructor and chairperson and one course in the Social Sciences

Lab fee: \$5.00

SSCI 299 Special Topics in the Social Sciences (On Demand)
1 - 5 credits

A detailed examination of selected topics of interest in the social sciences.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Varies

Lab fee: \$5.00

Sociology (SOC)

Students who enroll in sociology courses must have placed in ENGL 101 and are encouraged to either have completed ENGL 101 or be enrolled in that course when scheduling a sociology course.

SOC 101 Introduction to Sociology (A, W, SP, SU,–DL) 5 credits

This course introduces the basic concepts, methods, and findings of sociology as a scientific discipline. The sociological perspective, emphasizing social interaction and structure, is used to explore the following topics: culture; socialization; social groups, including organizations; deviance; various types of social inequality; major social institutions; collective behavior, social movement and social change. A distance-learning version

of Introduction to Sociology is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$5.00

SOC 202 Social Problems (A, W, SP, SU,–DL) 5 credits

This course examines how various conditions within society come to be defined as social problems. Individual, social, cultural, economic, and political causes and consequences of such problems are analyzed with contemporary social science research (i.e., studies in the fields of anthropology, economics, geography, political science, psychology, and sociology). Possible intervention strategies are also assessed. Problems covered include health and well being; social and interpersonal violence; conformity and deviance; social and economic inequality associated with poverty, minority status, aging, and sex roles; institutional change; and future issues and trends. A distance-learning version of Social Problems is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101; completion of SOC 101 is recommended, but not required

Lab fee: \$5.00

SOC 210 Sociology of Deviance (A, W, SP, SU,–DL) 5 credits

This course explores the major sociological perspectives and theories of deviance. This introductory course includes the study of the definition, identification, treatment, and management of types of deviance, such as crime, mental illness, alcoholism, and other pathologies. A distance-learning version of Sociology of Deviance is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101; completion of SOC 101 is recommended, but not required

Lab fee: \$5.00

SOC 230 Marriage and Family Relations (A, W, SP, SU,–DL)

5 credits

This course examines the impact of modern society upon the family as it relates to courtship, size of family, member relationships, economic problems, and marital stability. This course compares alternative life styles and marriage and family relations throughout the life span.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101; completion of SOC 101 is recommended, but not required

Lab fee: \$5.00

SOC 280 American Race and Ethnic Relations (A, W, SP, SU,–DL)

5 credits

This course explores racial and ethnic relations in the United States. The current and past experiences of selected American racial and ethnic groups are examined with respect to theories and patterns of intergroup relations and issues of prejudice and discrimination (both individual and institutional). Possible future trends in American intergroup relationships are addressed. A distance-learning version of American Race and Ethnic Relations is available. Students taking the Web-based version of the course must be familiar with computers, have an e-mail address, and access to the Internet. Course content is identical to that presented in a traditional classroom setting. Examinations for distance-learning courses

are administered at the Testing Center.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101; completion of SOC 101 is recommended, but not required

Lab fee: \$5.00

SOC 290 Capstone Experience in Sociology (On Demand) 3 credits

This course is for students completing the two-year Associate of Arts or Associate of Science degree who have a special interest in continuing in a baccalaureate degree program in sociology. The course presents a basic introduction to sociology research methodologies that students apply in researching a social science topic of interest. Course requirements include the assembly of a portfolio that covers student's academic career at Columbus State Community College and participation in summative testing of academic skills. Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters.

Lecture: 2 hours – Lab: 2 hours

Prerequisites: Completion of Associate of Arts or Associate of Science core requirements, at least 75 hours toward the degree, and five credit hours in sociology

Lab fee: \$5.00

SOC 293 Independent Study in Sociology (On Demand) 1 - 5 credits

An individual, student-structured course that examines a selected topic in sociology through intensive reading or research. The independent study elective permits a student to pursue his/her interests within the context of a faculty-guided program.

Lecture: 1 to 5 hours – Lab: 0 hours

Prerequisite: Permission of the instructor and the chairperson and one course in Sociology

Lab fee: \$5.00

SOC 299 Special Topics in Sociology (On Demand) 1 - 5 credits

A detailed examination of selected topics of interest in sociology.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Varies

Lab fee: \$5.00

Spanish (SPAN)

SPAN 100 Spanish for the Professions (A, W, SP, SU) 3 credits

In this course, students learn basic Spanish phrases and questions necessary to carry out specific protocols in a specific profession. Discussions also cover cross-cultural issues pertinent to relationships between non-Hispanic professionals and members of the Hispanic community. This course is useful for students interested in pursuing a career in a specific profession that has frequent contact with the Hispanic population.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$3.00

SPAN 101 Elementary Spanish I (A, W, SP, SU,–DL) 5 credits

Introduction to the fundamentals of the Spanish language with practice in listening, reading, speaking, and writing. Includes selected studies in Hispanic culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: Placement into ENGL 101

Lab fee: \$6.00

SPAN 102 Elementary Spanish II (A, W, SP, SU,–DL) 5 credits

Continuation of SPAN 101 with further development of listening, reading, speaking, and writing skills and further study of Hispanic culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: SPAN 101 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

SPAN 103 Intermediate Spanish I (A, W, SP, SU,–DL) 5 credits

Continued study of the Spanish language and development of listening, reading, speaking, and writing skills. Readings from contemporary Hispanic culture and literature. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: SPAN 102 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

SPAN 104 Intermediate Spanish II (A, W, SP, SU,–DL) 5 credits

Reading and discussion of Spanish and Latin American short stories, novels, plays, newspapers, and magazines, emphasizing literary appreciation and the development of Hispanic culture. Meets elective requirements in the Associate of Arts and Associate of Science degree programs and transfer requirements in foreign languages and literature.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: SPAN 103 with a grade of “C” or better or by placement exam

Lab fee: \$6.00

SPAN 105 Spanish Conversation and Composition (A, W, SP, SU) 1 credit

Conversation/composition course designed to provide students completing the 104-level an opportunity to continue practicing the language. Students discuss current events and personal experiences in the target language. Readings are taken from literary texts, journals, magazines and newspapers. The course is repeatable for a total of 5 hours of credit.

Lecture: 1 hours – Lab: 0 hours

Prerequisite: Completion of SPAN 104 or permission of instructor

Lab fee: \$4.00

SPAN 290 Capstone Experience in Spanish (On Demand) 3 credits

A capstone course focusing on Spanish. Paradigms and their underlying assumptions will be explored. Students will work on developing research techniques and methodologies. Students will apply these techniques to a project of their own design, complete a personal portfolio covering their studies at Columbus State, and participate in summative testing of their academic skills.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Open only to Associate of Arts or Associate of Science students preparing to graduate within two academic quarters

Lab fee: \$5.00

SPAN 299 Special Topics in Spanish (On Demand) 1-5 credits

Detailed examination of special topics in Spanish.

Prerequisite: varies

Lab fee: \$2.00

Sport and Exercise Studies (SES)

SES 100 Personal Fitness Concepts (A, W, SP, SU,–DL) 3 credits

This course of study focuses on fitness issues which affect Americans today and in the future. Emphasis is placed on establishing a basis for positive fitness through consideration of the various factors which influence fitness. Personal fitness concepts will focus attention on the need for each person to arrive at informed conclusions about how to take responsibility for his or her personal fitness.

Lecture: 3 hours – Lab: 0 hours

Lab fee: \$10.00

SES 101 Introduction to Sport & Fitness Management (W, SU) 3 credits

A survey of the health and fitness arena both private and public, to include the study of facilities, recreational options for the client, client profiles, daily operations, legal aspects, personnel issues, and program administration.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: Acceptance into the program

Lab fee: \$2.00

SES 102 Women's Total Body Conditioning (A, SP, SU) 1 credit

Participation in a resistance/aerobic fitness program to include cardio-respiratory fitness, strength training, and flexibility activities.

Lecture: 0 hours – Lab: 2 hours

Lab fee: \$10:00

SES 104 Beginning Yoga (A, W, SP, SU) 1 credit

Instruction in the fundamentals of yoga such as sun salutations, bandha (core) strength, and flexibility.

Lecture: 0 hours – Lab: 2 hours

SES 105 Introduction to Resistance Training (A, SP) 2 credits

An introduction to weight room use for the individual exerciser. Investigation of various types of resistance exercise devices, proper techniques and programs, and weight room safety. An introduction to basic anatomical and exercise concepts and their application in the use of resistance exercise modalities as a part of a total conditioning and exercise program.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$10.00

SES 106 Beginning Golf (A, SP, SU) 1 credit

An introductory exposure to playing the game of golf. Laboratory experiences to include: introduction to the golf swing, club selection, driving range experience and game/course experience.

Lecture: 0 hours – Lab: 2 hours

Lab fee: \$ 100.00

SES 108 Women's Self Defense (A, W, SP, SU) 1 credit

Instruction in the ideas of self-defense with special emphasis on the self-defense needs of women. Course will include self-defense techniques at the beginning level.

Lab: 2 hours

Prerequisite: None

SES 109 Beginning Bowling (A, W, SP, SU) 1 credit

Instruction in the methods of teaching and participation of bowling to include a thorough understanding of the scoring, techniques, skills, and fundamentals of the sport. This class allows students to participate in an individual sport and experience success in an independent environment.

Lab: 2 hours

Lab Fee: \$50.00

SES 113 Aquatics Management (SP, SU, AU) 2 credits

A survey of the recreational aquatics environment. Hands-on training in the filtration systems and their general operation, an understanding of federal and state guidelines for licensure for pool operation and maintenance. Legal aspects of the aquatics area. Staffing requirements and training of aquatics personnel for indoor and outdoor facilities. Students also will complete the American Red Cross Lifeguarding Certification as a part of this course.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$15.00

SES 114 Aerobic & Group Fitness (A, SP) 2 credits

Introduction into the methods of teaching participation in a fitness program, to include a thorough understanding of the fundamental techniques of the sport. The history and the value of dance for the client, the basic movements of dance, and the interpretation of music and language for

dance and aerobic conditioning. Students will demonstrate fundamental techniques of a fitness program including safety, motivation, goal setting, and variations of aerobic and group fitness.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$10.00

SES 115 Intermediate Resistance Training (A, SP) 2 credits

Analysis of the resistance training field to include types of resistance equipment used, resistance-training methods for the client, proper lifting and spotting techniques for the various equipment, assessment of clients. Goal setting for clients based on assessment findings, and the use of periodization techniques in planning resistance training activities. Risk management aspects of the weight area and proper care and maintenance of equipment.

Lecture: 1 hour – Lab: 2 hours

Prerequisite: SES 105 or permission of instructor

Lab fee: \$20.00

SES 116 Golf Management (A, SP, SU) 2 credits

An in-depth analysis of the game of golf. To include the historical study of the game, the rules which apply to the playing of the game, and a perspective of the growth and increasing significance of the game inside and out of the industry. A study of the management of the golf facility, turf and environmental issues, employment options and the instruction of the game.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$100.00

SES 117 Introduction to Tae Kwon Do (A, W, SP, SU) 2 credits

Introduction to coaching and participating in the activity, to include a thorough understanding of the rules and sport strategy. History of the art form, self defense strategies, and concepts of tournament sparring and tournament implementation.

Lecture: 1 hours – Lab: 2 hours

Lab fee: \$20.00

SES 190 SES Freshman Seminar 1 credit

A survey of the sport and exercise studies profession and academic discipline. This class prepares students for the navigation of the SES curriculum and applicable academic technology and learning tools. The course will introduce students to the campus resources available for their research and writing assignments, update them on the technology skills required for graduation, familiarize them with industry trends, and introduce them to personal development skills that they can use upon graduation. This course must be taken in either the first or second quarter of enrollment in the Sport and Exercise Studies program.

Lecture: 1 hour

Prerequisite: Admission to the SES program

Lab fee: \$10.00

SES 205 Activities Programming for the Elderly in Long Term Care (On Demand) 9 credits

This course demonstrates how management of an activity department promotes the psychosocial, physical, emotional, creative and intellectual well being of residents. This course provides a student with practical and theoretical framework from which to develop and manage a comprehensive program of activities within long term settings. This course uses the NAAP/NCCAP curriculum known as the mepacourse. Students are awarded a certificate of completion when the course is completed with a grade of "C" or higher. The Ohio Department of Health accepts this certificate. This certificate will also qualify the student to apply for National Certification.

Lecture: 9 hours

Lab fee: \$10.00

SES 213 Aquatic Programming for Individuals with Disabilities (On Demand) 3 credits

The adaptive aquatic course content will provide utilization of special-

ized instructional technology to maximize learning and participation of individuals with disabilities in aquatic activities. The inclusive or community setting will be emphasized since acquisition of skills and water safety knowledge should occur in as normalized a manner as possible. Practicum opportunities with diverse populations will highlight the learning experiences.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$20.00

SES 214 Advanced Dance Exercise (On Demand) 2 credits

Instruction in the methods of teaching and participation in group fitness activities to include a thorough understanding of the skills and the fundamental techniques of fitness instruction. The value of dance exercise and variations for the client, the movements and techniques of dance exercise, and the principles and legalities that guide fitness instructors.

Lecture: 1 hour – Lab: 2 hours

Prerequisite: SES 114

Lab fee: \$10.00

SES 215 Advanced Resistance Training (A, SP) 3 credits

This class will be a continued study of systems of physical conditioning. Including discussion of progressive resistance exercise through super sets, pyramiding, split routines, plyometrics and isokinetics. Program development including interval, continuous, and circuit training. Non-traditional training including partner resistance training. Other topics will include discussion of advantages and disadvantages of commercial exercise equipment in developing cardiorespiratory fitness and muscular strength. Musculoskeletal risk factor identification and programming for post injury rehabilitate fitness will also be included.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: SES 115

Lab fee: \$20.00

SES 217 Advanced Tae Kwon Do (A, SP, On Demand) 2 credits

Features instruction in the teaching methods, and practice of, advanced Tae Kwon Do. Instruction will include a thorough understanding of the skills, fundamentals, and techniques of the sport. Course includes marketing Tae Kwon Do, advanced self-defense strategies, weaponry, and concepts of Olympic competition events.

Lecture: 1 hour–Lab: 2 hours

Prerequisite: SES 117 or permission of the instructor

Lab fee: \$20.00

SES 222 Court Sports I (Tennis) (SU) 2 credits

Instruction in the coaching and participation in the activity, to include a thorough understanding of the rules and sport strategy. History of the sport and coaching techniques for the client, tournament set up and implementation for the facility.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$20.00

SES 223 Court Sports II (Racquetball) (W) 2 credits

Instruction in the coaching and participation in the three activities, to include a thorough understanding of the rules and sport strategy, history of the sport and coaching techniques for the clients, tournament set up and implementation for the facility.

Lecture: 1 hour – Lab: 2 hours

Lab fee: \$20.00

SES 224 Sport Management Foundations (W, SU) 5 credits

An advanced study of the facilities required for the recreational environment, including an analysis of indoor and outdoor designs and utilization. Presents an overview of the personnel process, staffing requirements, and staff development procedures. Also offers a study of activity programming for the club environment, to include class structure, tournament procedures, proper selection of activities, and equipment needed as well as its proper care and storage.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: SES 101

Lab fee: \$10.00

SES 225 Athlete Intervention (On Demand,–DL) 3 credits

This course is designed to train sport managers to help athletes avoid or deal with the challenges of alcohol, drugs, and illegal drug use. The program allows sport managers to develop rules and expectations about drug and alcohol use, communication with parents and guardians, and behavior monitoring skills. Lessons on development of policies related to athlete usage and consequence and/or infraction guidelines.

Lecture: 3 hour – Lab: 0 hours

Lab fee: \$5.00

SES 226 Care and Prevention of Athletic Injuries (W, SU) 3 credits

Recognition, treatment, management, and prevention of basic injuries sustained while participating in athletic activities. Basic taping and treatment procedures to be introduced and applied in the athletic environment.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: SES 100 or permission of instructor

Lab fee: \$10.00

SES 230 Fitness Concepts for Special Populations (A, SP,–DL) 3 credits

A survey of the response of children, seniors, and physically challenged persons to exercise. Emphasis to be placed on choosing appropriate and challenging activities that will result in a positive physiological response while accommodating the social, developmental and physical needs of the potential clients.

Lecture: 3 hour – Lab: 0 hours

Lab fee: \$3.00

SES 231 Exercise Physiology (A, W, SP, SU,–DL) 3 credits

Instruction in the testing processes used for the individual evaluation to include proper techniques used for body fat, analysis, aerobic and anaerobic capabilities, muscle mass, flexibility, and program development for the athlete.

Lecture: 3 hours

Prerequisite: BIO 121 or 261 with a “C” or better

Lab fee: \$15.00

SES 232 Physical Fitness Assessment (A, W, SP, SU) 2 credits

This course is a corequisite with SES 231. Emphasis will be placed on psychomotor skill and decision-making improvement in assessing fitness components in the apparently health. Skills will include assessment techniques of vital signs, muscular flexibility, muscular strength and endurance, body composition, anaerobic capacity, and cardiorespiratory fitness.

Lab: 4 hours

Corequisite: SES 231

SES 233 Outdoor Community Recreation (A, W, SP, SU) 3 credits

A survey of the outdoor recreational market and it’s application through corporate America. Offers a review of outdoor recreational opportunities, basic activities, skills, and necessary equipment. Covers present safety, liability, and associated programming issues, and examines the business, career, and recreational applications of this specialized market.

Lecture: 2 hours – Lab: 2 hours

Lab fee: \$50.00

SES 234 Sport Marketing (A, SP,–DL) 5 credits

An advanced study of sports marketing strategies for the club both internal and external. Promotional guidelines and discussion of concepts of promotional activity. Study of the budgetary process, differentiation of budget styles, and implementation of the budgetary process in both the private or public sector.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: SES 101 and 224

Lab fee: \$3.00

SES 235 Sport Law (A, W, SP, SU,–DL) 3 credits
Survey of the legal framework of the athletic environment. The nature of the legal system and the law pertaining to sports, to include tort law, contractual agreements, and civil law.
Lecture: 3 hours – Lab: 0 hours
Lab fee: \$2.00

SES 237 Corporate Health (On Demand,–DL) 3 credits
An assessment and analysis of current health and wellness issues related to the worksite environment. Course work will emphasize the major wellness components of fitness, nutrition, safety, and behavior modification and how these components can be introduced into the worksite. This course will also focus on the financial and administrative issues associated with worksite health promotion.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: SES 101 or permission of instructor
Lab fee: \$3.00

SES 238 Aging Fitness and Exercise (On Demand,–DL) 3 credits
Physical activity can significantly improve the quality of one's life at all ages, although the type and intensity of activity may change. This course will present the essential information needed to provide older adults with safe and effective fitness programming. The physiology of aging, and the techniques and tools for motivating older adults, personal fitness, pre-exercise screening, and fitness assessment are presented.
Lecture: 2 hours – Lab: 2 hours
Lab fee: \$10:00

SES 239 Quantitative Methods in Exercise Science (W, SU, On Demand) 3 credits
This course focuses on methods of quantifying metabolic demand, identifying risk factors, determining appropriate assessment protocol, and developing proper fitness programs for clients who are apparently healthy, increase risk, and with known disease. Course work will emphasize calculating and estimating metabolic demand of exercise, normal physiological response to exercise, and the abnormal physiological response to exercise. This course will also focus on the appropriate selection of fitness protocols for those clients who suffer from compromised health.
Lecture: 3 hours
Prerequisite: SES 232

SES 241 Kinesiology (A, W, SP, SU, DL) 5 credits
Introduction to the fundamentals of kinesiology and biomechanics with discussion of both anatomical and mechanical principles. These concepts will be applied in the analysis of a wide variety of basic motor skills, exercise, and sport activities.
Lecture: 3 hours – Lab: 4 hours
Prerequisites: BIO 121 or 261 with grade of "C" or higher and SES 231 or permission of instructor
Lab fee: \$15.00

SES 242 Exercise Prescription (A, On Demand) 3 credits
This course provides the art and science of using fitness-related data to make informed individual exercise prescriptions. Emphasis will be placed on the use of objective measures of fitness assessments to drive goal- and time-dependent decision-making. Measures include using prescriptive principles on behavior modification to support exercise adherence, risk stratification, fitness-related technology, cardiorespiratory, musculoskeletal flexibility, and muscular strength and endurance.
Lecture: 2 hours – Lab: 2 hours
Prerequisite: SES 232

SES 280 History of Sport in the United States: 1840-Present (On Demand,–DL) 3 credits
An in-depth analysis of the history of sport, athletics, and recreation in the United States of America. Lecture and related activities will explore the role of sport in the lives of Americans since 1840 and assess the economic, political, social, and psychological impact sport has played as a part of the larger historical framework of the nation.

Lecture: 3 hours – Lab: 0 hours
Lab fee: \$3:00

SES 292 Practicum I (A, SP) 3 credits
Practical training in the sport profession to include activity preparation, personnel evaluation, and budget analysis. This course also includes an on campus seminar to discuss issues relating to the profession. Summative assessment will include a combination of objective tests, performance checklists, and evaluation by the on-site supervisor.
Lecture: 1 hour – Lab: 14 hours
Prerequisite: SES 224 or permission of instructor.
Lab fee: \$3.00

SES 294 Practicum II (W, SU) 3 credits
Continuation of SES 292. Working in conjunction with a current sport manager to gain insight on program and facility operation, budgetary implementation, and assist in the daily operation of a fitness facility. This course also includes an on campus seminar to discuss issues relating to the profession. Summative assessment will include a combination of objective tests, performance checklists, and evaluations by the on-site supervisor.
Lecture: 1 hour – Lab: 14 hours
Prerequisite: SES 292 or permission of instructor
Lab fee: \$3.00

SES 298 Special Topics in Sport (On Demand,–DL) 3 credits
This course serves to bring together concepts discussed in previous program courses. Topics of discussion will revolve around exercise prescription for special populations, some disease states, or social aspects of sport such as homophobia in sport. Development and modification of institutional programming based on individual and group needs. Resources, content and delivery of health promotion programs will also be discussed.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Permission of instructor
Lab fee: \$3.00

SES 299A Active Living I (A, W, SP, SU,–DL) 1 credit
Active Living Every Day is the first course of a two-quarter sequence that focuses on helping sedentary people become and stay physically active for a lifetime. This evidence-based course uses established behavior change models such as the stages of readiness to change to empower people to overcome their barriers to physical activity. Participants find ways to fit physical activity into their daily lives and maintain active lifestyles even when difficult life situations arise.
Lecture/Discussion: 1 hour – Lab: 0 hours
Prerequisite: Permission of instructor

SES 299B Active Living II (A, W, SP, SU,–DL) 1 credit
Continuation of Active Living I
Lecture/Discussion: 1 hour – Lab: 0 hours
Prerequisite: Permission of instructor

SES 299C Healthy Eating I (A, W, SP, SU,–DL) 1 credit
Healthy Eating Every Day is the first course of a two-quarter sequence that helps people establish a balanced and healthy approach to eating. This course presents a sensible and realistic way of eating that is in line with and complements the new USDA Nutrition Guidelines. Healthy Eating Every Day uses an evidence-based, cognitive behavioral approach to helping people change their diets. Participants learn how to identify the reasons for their poor eating choices and acquire the lifestyle-management skills they need to improve their eating permanently.
Lecture/Discussion: 1 hour – Lab: 0 hours
Prerequisite: Permission of instructor

SES 299D Healthy Eating II (A, W, SP, SU,–DL) 1 credit
Continuation of Healthy Eating I
Lecture/Discussion: 1 hour – Lab: 0 hours
Prerequisite: Permission of instructor

Supply Chain Management (LOGI)

LOGI 100 Principles of Supply Chain Management (A, W, SP, SU,-DL)

5 credits

A study of the basic concepts included in the field of supply chain management with particular emphasis on the economic significance of distribution to business and the U.S. economy. The interrelationship between logistics and other areas of business will be covered with particular emphasis on how logistics can significantly impact customer loyalty by adding value. Knowledge of basic algebraic concepts is strongly recommended.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: None

Lab fee: \$5.00

LOGI 110 Transportation & Traffic Management (W,-DL)

4 credits

Introduction to traffic management function including mode and carrier selection.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LOGI 100

Lab fee: \$5.00

LOGI 151 Purchasing Principles I (A, SP,-DL)

3 credits

This course is designed to teach the basics of purchasing management to the newly appointed buyer or non-purchasing personnel looking to broaden their business knowledge. Topics covered include the challenge of purchasing and materials management, objectives and organization, function, specification, quality control and inspection, computerization, and quality considerations.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: None

Lab fee: \$5.00

LOGI 152 Purchasing Principles II (W,-DL)

3 credits

This course is a continuation of Purchasing Principles I and focuses on how the basics of good buying can be used effectively to meet the challenges and responsibilities of the constantly changing business climate. Topics include forward buying, international purchasing, buying capital assets and purchasing transportation services.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LOGI 151

Lab fee: \$5.00

LOGI 205 Freight Claims (W,-DL)

3 credits

This course provides a study of freight loss, damage claims, and adjustment of claims in various modes of transportation including carrier and shipper liability, transportation documentation, and claim filing procedures.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LOGI 100

Lab fee: \$5.00

LOGI 210 Warehouse Management (A, SP,-DL)

4 credits

This course is an analysis of warehousing functions and management. Topics covered include facility location and operation, labor relations, financial analysis and productivity improvement and measurement.

Lecture: 4 hours – Lab: 0 hours

Prerequisite: LOGI 100

Lab fee: \$5.00

LOGI 211 Inventory Management (W)

4 credits

A study of inventory control problems and methods is the focus of this course. Topics covered include demand forecasting, independent demand inventory systems, inventory models and aggregate planning.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: LOGI 151 and LOGI 210, or permission of instructor

Lab fee: \$5.00

LOGI 225 International Shipping (SP,-DL)

5 credits

This course is a study of global supply chain management with emphasis on the requirements for importing and exporting. Laws, regulations, paperwork and international billing terms will be discussed.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: LOGI 100

Lab fee: \$5.00

LOGI 226 Introduction to Export Administration Regulations (A,-DL)

4 credits

A detailed examination of the Export Administration Regulations (EAR) covering the information exporters need to know to understand and comply with the U. S. export control requirements on commercial goods. The course focuses on what items and activities are subject to the EAR; what steps to take to determine the export licensing for an item; how to determine an export control classification number (ECCN); when an item can be exported or re-exported without applying for a license; export clearance procedures; recordkeeping requirements; Export Management System (EMS) concepts; and “real life” examples in applying this information.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: LOGI 100

Lab fee: \$5.00

LOGI 227 Electronic Import/Export Documentation (W,-DL)

4 credits

Provides students with the tools to prepare export/import documentation electronically; manage e-Business and marketing functions related to global commerce; and evaluate and control e-Commerce systems. Acceptance of electronic export/import documentation by nongovernment organizations, e.g., banks, forwarders, carriers, etc., continues to increase and is rapidly replacing paper-based systems. Additionally, regulatory agencies’ requirements for electronic document submission have significantly increased post 9/11; course content subject to change in response to new or changing user requirements.

Lecture: 1 hour – Lab: 2 hours

Prerequisites: LOGI 100

Lab fee: \$47.00

LOGI 228 Importing (W,-DL)

4 credits

An introduction to procedural compliance with import regulations of the U. S. Customs & Border Protection (CBP) emphasizing the Trade Act of 2002, Advanced Electronic Information, published in the Federal Register on December 5, 2003. Additional topics discussed include antidumping and countervailing duties; informed compliance; commercial enforcement; the regulatory audit program; quotas; and customs broker management. Note that procedures and regulations are in a current state of flux and course content may be revised in response to changes.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: LOGI 100

Lab fee: \$5.00

LOGI 229 International Transportation Regulatory Compliance (W,-DL)

4 credits

This course is an examination of the laws that apply to domestic motor carrier and rail and international air, ocean, and multi-modal transportation. Covers the evolution of various transportation laws, e.g., the Carriage of Goods by Sea Act (COGSA); the Warsaw Convention; the Montreal Protocol; the International Multimodal Convention; cabotage law, freight claims, and cross-border trucking under the North American Free trade Agreement (NAFTA); course content varies as laws are revised and created.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: LOGI 100

Lab fee: \$5.00

LOGI 241 Supply Chain Management Practicum I (A, W, SP,-DL)

4 credits

Supervised on-the-job application of knowledge and skills acquired in the classroom is the purpose of this course. Open to Supply Chain Manage-

ment Technology students only. Internship applications must be filed with the department at least 2 months prior to the internship start date.

Lecture: 0 hours – Lab: 28 hours

Prerequisite: Advisor approval required

Corequisite: LOGI 242

Lab fee: \$5.00

LOGI 242 Supply Chain Management Seminar I (A, W, SP,–DL) 2 credits

Application of logistics knowledge to specific areas of on-the-job experience is the focus of this seminar. Open to Supply Chain Management Technology students only. Internship applications must be filed with the department at least 2 months prior to the internship start date

Lecture: 0 hours – Lab: 4 hours

Prerequisite: Advisor approval required

Corequisite: LOGI 241

Lab fee: \$5.00

LOGI 246 Purchasing Negotiation (SP,–DL) 3 credits

This course focuses on the skills required to prepare for and conduct purchasing negotiations.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LOGI 151 or permission of instructor

Lab fee: \$5.00

LOGI 250 Transportation of Hazardous Materials (SP,–DL) 3 credits

A study of the transportation of hazardous materials within the United States and the regulations and compliance issues resulting from these regulations. The course delves into the usage of the Code of Federal Regulations Part 49 100-185, the manual used to regulate all materials deemed hazardous. The segregation of the 9 classes of HAZMAT, the limitations of each shipment and the usage of this manual will encompass the course. The student will develop a better understanding of HAZMAT and the rules and regulations concerning the shipments.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LOGI 100

Lab fee: \$5.00

LOGI 256 Advanced Purchasing Seminar (SP,–DL) 3 credits

A capstone course designed for the purchasing major. A comprehensive case study approach will be used to understand purchasing as the primary materials procurement activity while integrating purchasing with other materials management activities. Topics covered include legal considerations, public purchasing, the planning process, and control functions such as inventory control, budgeting, and production.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: LOGI 152

Lab fee: \$5.00

LOGI 260 Performance Management for Logistics Managers (SP) 4 credits

A capstone course designed around the steps in the performance/communication process as it relates to recognizing, understanding, planning, implementing and evaluating performance competencies. The course will look at performance challenges in the logistics arena and how to proactively approach and resolve them. It will also focus on creating positive relationships and ensuring effective workplace communication.

Lecture: 4 hours – Lab: 0 hours

Prerequisites: LOGI 100, LOGI 151, LOGI 211, ACCT 106

Lab fee: \$5.00

LOGI 297 Special Topics in Logistics (On Demand) 1 - 3 credits

Detailed examination of special topics of interest in Supply Chain Management (logistics). Topics vary.

Lecture: 1 hour – Lab: 3 hours

Lab fee: \$5.00

Surgical Technology (SURG)

SURG 102 Surgical Technology I (A) 7 credits

This course will provide an in-depth introduction of the role and responsibilities of the surgical technologist as an important professional in the delivery of surgical services. Introduction to the surgical environment will include professional responsibilities, legal and ethical considerations, interpersonal relationships, communication skills, and basic surgical workplace safety. Introduction to the principles of aseptic technique to include surgical asepsis, scrubbing, gowning, gloving, sterilization, disinfection, and operating room sanitation are explored. Direct patient care interventions to include positioning, prepping, draping techniques, and related operative procedures. Introduction to diagnostic procedures and anesthesia and pharmacological considerations for patient surgical care are investigated. The surgical use of instrumentation, sutures, needles, sponges, syringes, and hypodermic needles are investigated. Students will be exposed to lecture, discussion, seminar, and recitation educational experiences all in support of direct patient care laboratory, practicum, and clinical applications in a variety of hospital-based surgery units.

Lecture: 3 hours – Lab: 12 hours

Prerequisite: Completion of all admission criteria for the Surgical Technology program.

Lab fee: \$50.00

SURG 104 Surgical Technology II (W) 7 credits

Principles of asepsis and the patient care concepts of positioning, prepping, draping, and procedural techniques are directly applied to the investigation of General (GEN), Gastrointestinal (GI), Obstetrics (OB), Gynecological (GYN), and Genitourinary (GU) surgical services. The role and responsibilities of the surgical technologist as the “scrub” member and the “circulator” member of the surgical team will focus on maintaining the integrity, safety, and efficiency of the sterile and non-sterile areas throughout various surgical procedures. Investigation of instrumentation, sutures, needles, dressings, packings, drainage tubes/systems, and auto-stapling devices will continue along with a focus on endoscopy use in GEN, GI, OB, GYN, and GU surgical services. Students will be exposed to lecture, discussion, seminar, and recitation educational experiences all in support of direct patient care laboratory, practicum, and clinical applications in a variety of hospital-based surgery units.

Lecture: 3 hours – Lab: 12 hours

Prerequisite: SURG 102

Lab fee: \$50.00

SURG 202 Surgical Technology III (SP) 9 credits

The principles of asepsis and the patient care concepts of positioning, prepping, draping, and procedural techniques are directly applied to the investigation of Orthopedic (Ortho) and Neurosurgery (Neuro) surgical services. The role of the surgical technologist as the “scrub” member and the “circulator” member of the surgical team continues to focus on maintaining the integrity, safety, and efficiency of the sterile and non-sterile areas throughout various surgical procedures. Investigation of instrumentation, sutures, needles, dressings, packings, and drainage tubes/systems will continue with a focus on selected internal and external fracture stabilization devices, cast immobilization, spinal fixation implants, and neurosurgical shunts. Students will be exposed to lecture, discussion, seminar, and recitation educational experiences all in support of direct patient care laboratory, practicum, and clinical applications in a variety of hospital-based surgery units.

Lecture: 4 hours – Lab: 15 hours

Prerequisite: SURG 104

Lab fee: \$50.00

SURG 204 Surgical Technology IV (SU) 9 credits

The principles of asepsis and the patient care concepts of positioning, prepping, draping, and procedural techniques are directly applied to the investigation of Plastic and Reconstructive, Otorhinolaryngology and Throat (EENT), Ophthalmic (OP), Thoracic, Peripheral Vascular (PV), and Cardiovascular (CV) surgical services. The role of the surgical technolo-

gist as the “scrub” member and as the “circulator” member of the surgical team continues to be explored throughout various surgical procedures. Investigation of instrumentation, sutures, needles, dressings, packings, and drainage tubes/systems will continue with a focus on ocular implants, microscopic use, skin grafting techniques, liposuction use, mammoplasty implants, inner ear shunts, and tracheotomy tubes, endoscopy use, chest tubes, cardiopulmonary bypass, vascular autografts and allografts, intra aortic balloon pumps, and vascular shunts. Students will be exposed to lecture, discussion, seminar, and recitation educational experiences all in support of direct patient care laboratory, practicum, and clinical applications in a variety of hospital-based and ambulatory surgery centers. Lecture: 4 hours – Lab: 15 hours

Prerequisite: SURG 202

Lab fee: \$50.00

SURG 250 Surgical Technology V (A) 7 credits

This course will provide the Surgical Technology student with an in-depth analysis, recognition, and medical/surgical treatment for a variety of advanced surgical specialty areas. These areas include Orthopedic Total Joint Replacement, Laser Therapy, Endoscopy, Ophthalmic, Oncology, Obstetrics, Pediatrics, Cardiovascular, Ambulatory Surgery, and Organ Procurement. Additional surgical specialty areas of interest will be investigated and offered to students, alumni, and surgical health care professionals as they become available. Students will be exposed to lecture, discussion, seminar, and recitation educational experiences all in support of direct patient care laboratory, practicum, and clinical applications in a variety of hospital-based and ambulatory surgery units.

Lecture: 3 hours – Lab: 12 hours

Prerequisite: Completion of the certificate tract Surgical Technology program or equivalent training

Lab fee: \$50.00

SURG 251 Surgical Technology VI (W) 7 credits

This course will provide the Surgical Technology student with an in-depth analysis, recognition, and medical/surgical treatment for a variety of advanced surgical specialty areas. These areas include: Orthopedic Total Joint Replacement, Laser Therapy, Endoscopy, Ophthalmic, Oncology, Obstetrics, Pediatrics, Cardiovascular, Ambulatory Surgery, and Organ Procurement. Additional surgical specialty areas of interest will be investigated and offered to students, alumni, and surgical health care professionals as they become available. Students will be exposed to lecture, discussion, seminar, and recitation educational experiences all in support of direct patient care laboratory, practicum, and clinical applications in a variety of hospital-based and ambulatory surgery units.

Lecture: 3 hours – Lab: 12 hours

Prerequisite: Completion of the certificate tract Surgical Technology program or equivalent training

Lab fee: \$50.00

Surveying (SURV)

Also see Civil Engineering Technology (CIVL)

SURV 100 Introduction to Geomatics (A) 2 Credits

An introductory course into the field of surveying and mapping technology. Integrated topics include drafting, surveying, cartography and geographic information systems.

Lecture: 1 hour – Lab: 3 hours

Prerequisite: Placement into ENGL101

SURV 140 Surveying and GPS (A, SP,–On Demand) 4 Credits

A comprehensive study in the acquisition of spatial data through the use of conventional surveying equipment and Global Positioning System (GPS). The course elements include measurement theory, precision

and accuracy determinations, traditional and present day measurement systems, GPS theory, acquisition of spatial data through the use of total station and electronic data collectors, self-leveling and digital levels and hand-held code phase GPS receivers. Specific tasks include traversing for purpose of property boundary location, establishing horizontal and vertical control for aerial photography and topographic mapping. Data quality comparisons from all three sources (conventional and GPS) are performed. Data manipulation includes downloading data from the various means of acquisition into a common electronic format. Data generated in the course will be used in GIS110–Scanning, Digitizing and CAD and GIS 203–Photogrammetry and Remote Sensing. Not open to students in Architecture, Civil Engineering Technology, Construction Management or Landscape Design/Build programs.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: MATH 104 or MATH 112

Lab fee: \$15.00

SURV 141 Basic Surveying (A, SP, SU) 4 Credits

A comprehensive study in performing measurements for the collection of data and for construction layout. The course elements include application of the English and metric (SI) measurement systems in performing angular and distance measurements by traditional methods and by total station for the purpose of traversing and location of property corners, topographic mapping and construction staking. Elements of differential leveling are used for establishing the elevations of new bench marks, topographic mapping by grid method and cut/fill calculations to finish floor elevations of proposed structures. Data manipulation includes taping corrections, precision and accuracy determination, traverse closures, level circuit reductions, radial building staking notes and boundary line determination by inverse coordinates.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: MATH 104 or MATH 112

Lab fee: \$15.00

SURV 241 Route Surveying (A, SP, SU) 4 Credits

A comprehensive study of the elements of route alignment including horizontal circular and spiral curves, combinations of circular and spiral curves, vertical curves, centerline and offset staking for rough and finished grade. The course includes the application of all elements of route design, construction staking and earthwork volume determination in a comprehensive integrated project format.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: MATH 104, CIVL 123, SURV 141

Lab fee: \$15.00

SURV 242 Computer Applications in Surveying (AU) 3 Credits

This course involves the integrated use of word processing, spreadsheet, database management, and graphic and computer assisted drafting software to solve problems associated with the surveying industry and to produce formal engineering reports using Autodesk Land desktop. The course elements include data entry, data analysis, measurement theory, precision and accuracy determinations and data presentation.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: ARCH112 and SURV140 or SURV141

Lab fee: \$7.00

SURV 243 Heavy Construction Standards (SP) 4 Credits

Elements of route location, construction materials, methods and procedures. Relation of design standards to topography and prospective traffic, earthwork measurement, physical design standards, and financing.

Lecture: 3 hours – Lab: 2 hours

Prerequisites: SURV 241, CIVL 123, and CMGT 105

Lab fee: \$15.00

SURV 245 Survey Law (W) 3 Credits

A study of statute and common law as pertains to land surveying and real property rights and the methods to describe real property. Students enrolled in the distance version of this course will be required to come

to campus for exams.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: SURV 141

Lab fee: \$15.00

SURV 247 Townsite/Urban Development (SP) 3 Credits

Analysis of data and related inventory methods needed to logically plan development of all land use types. Study the forces and actions by public agencies and private interests that create the urban form. Review methods of resolving conflicts and understanding the applicable land use regulations or standards that govern area development.

Lecture: 1 hours – Lab: 5 hours

Prerequisites: ARCH 112 and SURV 241

Lab fee: \$15.00

SURV 248 Advanced Surveying Systems (SP) 4 Credits

Planning and execution of control surveying, cadastral surveying, network adjustment and topographic surveying using total stations and data collections, satellite positioning (Global Positioning Systems) and photogrammetric (aerial mapping) systems.

Lecture: 2 hours – Lab: 6 hours

Prerequisites: ARCH 112 or ARCH 115, MATH 148, SURV 141, SURV 245 and SURV 249 or corequisite

Lab fee: \$15.00

SURV 249 Land Subdivision Systems (SP) 3 Credits

Advanced surveying including section and subdivision lines and residential property lines. Reestablishment of property boundaries and legal considerations for boundary descriptions, including local municipal records searching. Lecture: 2 hours – Lab: 3 hours

Prerequisites: ARCH 112, SURV 241 and SURV 245

Lab fee: \$15.00

SURV 299 Special Topics in Civil Engineering Technology (On Demand) 1-5 credits

Special topics in civil engineering technology industry designed to meet specific needs.

Lecture: 1 hour – Lab: 1-15 hours

Prerequisite: Permission of instructor

Lab fee: \$10.00

Technical Communication (TCO)

TCO 101 Careers in Technical Communication (A, SP) 2 credits

In this course, students are required to interview with technical communication professionals, research the field of technical communication, and deliver an oral presentation of the findings. Discussions of career goals, including the preparation of an initial resume and employment data file will also be required. The requirements of this course must be met within the first two quarters of entering the Technical Communication degree program.

Lecture: 1 hours – Lab: 2 hours

Lab fee: \$20.00

TCO 102 Tools and Techniques for Technical Communicators (W, SU) 3 credits

This course will introduce students to the software tools and basic techniques required of entry-level technical communicators. Students will learn about the various hardware and software tools technical communicators use on a daily basis. Lectures on general principles will be followed by exercises selected to simulate employer expectations. Mastery of techniques needed to complete daily technical communication tasks will be emphasized.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: CIT 101, TCO 101 or corequisite enrollment

Lab fee: \$8.00

TCO 203 Introduction to Technical Communication (W, SU) 3 credits

In this course, students learn the project documentation cycle used by technical communicators in business, industry, and government by selecting an authentic problem-solving project from their technical cognate fields, and writing and formatting a series of reports in support of that project. Students learn the principles of modern technical communication and time/project management and practice them individually and in small groups throughout the documentation cycle.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: CIT 101 and ENGL 102 with a grade of “C” or higher.

Lab fee: \$5.00

TCO 204 Introduction to Technical Editing (A, SP) 3 credits

In this course, students will practice editorial skills needed for revising scientific/technical writing by checking grammar, sentence structure, clarity and style in personal, peer, and professional writings. Students will practice hard copy and online editing and proofreading and analyze editorial style books and other technical resource materials. Various editorial approaches and the editor/author relationship will be covered.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: ENGL 102 with a grade of “C” or higher and OADM 101

Lab fee: \$5.00

TCO 214 Document Design & Delivery Methods (W, SU) 3 credits

This course will introduce students to learning theory as applied to the design and delivery of technical documents. It will integrate current technical communication theory in document design and delivery with the capabilities of various software packages and delivery methods. Students will develop skills in applying design theory to technical documents and in selecting appropriate delivery methods for technical documents

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 203

Lab fee: \$8.00

TCO 215 Online Documentation (A, SP) 3 credits

This course will introduce students to all aspects of creating online documentation. Students will learn about the five phases involved in creating online documentation: planning, designing, and modifying information for online presentation, and testing and redesigning. Students will develop actual online documentation for a software package during the course.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: TCO 203 and TCO 214

Lab fee: \$8.00

TCO 221 Proposal Development (A) 3 credits

Students will learn how to develop proposals which offer to solve problems for a reader or groups of readers by providing specified services at a specified cost. The units involved in the learning process will include understanding the bidding process, defining the request for a proposal, planning and developing a proposal document and practicing the methods of formatting, writing, editing and presenting a formal business proposal.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 203

Lab fee: \$5.00

TCO 222 Developing Software Documentation (W) 3 credits

In this course, students are prepared as software documentation specialists to work with software users and developers. Students will prepare software documentation, conduct document usability testing, and perform documentation development tasks, such as preparing user specifications, task lists, style guides, project schedules, instruction sets, and problem reports, as well as conducting interviews, reviews, and walk throughs.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 203

TCO 223 Advanced Technical Communication (W, SU) 3 credits

In this course, students focus on current research and theory in scientific and technical writing and apply that research to practical situations. Students produce a proposal for funding, a full-length portfolio quality manual or report, and various other writing assignments. They also lead class discussions on such topics as readability theory, writing style, documentation methods, text processing, manual formatting, and integrating graphics and text.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 203

Lab fee: \$5.00

TCO 224 Advanced Technical Editing (A, SP) 3 credits

In this course, students are prepared as editors to work with other publications specialists. Students will edit manuscripts, prepare style books or manuals, and perform special editorial tasks such as preparing abstracts, indexes, and bibliographies with line-by-line precision and accuracy.

Lecture: 2 hours – Lab: 3 hours

Prerequisites: TCO 203 and TCO 204

Lab fee: \$5.00

TCO 230 Technical Presentations (W, SP) 3 credits

In this course, students learn to prepare and present various types of information ranging from press releases, annual reports, and statistical analyses to proposals for projects, systematic evaluations, and revisions of existing documents. Various types of audiences will be targeted, and students will be required to use computer graphics, hypermedia, desktop publishing, and multimedia approaches to supplement oral presentations.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 223

Lab fee: \$5.00

TCO 235 Instructional Design (A, SP) 2 credits

Students will study the phases of an Instructional Design Project. They will conduct a needs assessment and define the skill and knowledge requirement of a job assignment. They will learn the typical training development cycle.

Lecture: 1 hours – Lab: 3 hours

Prerequisite: TCO 230 or current enrollment

Lab fee: \$5.00

TCO 236 Computer-Based Training (W, SU) 3 credits

Students will study instructional design as it applies to developing Computer-based Training (CBT) modules. They will learn the typical CBT development cycle and design CBT screens, incorporating multimedia effects and maximum interactivity.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 235

Lab fee: \$8.00

TCO 237 Digital Video Production for the Workplace (A) 3 credits

Digital Video Production for the Workplace is an introduction to basic and advanced techniques for creating and using digital video in the workplace. During the course, students will storyboard and write scripts, shoot and acquire clips, edit electronically, work collaboratively, and present video segments appropriate for a workplace environment. Students will critique examples and work on individual and group projects to produce a final product. This course is intended for Technical Communication students.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: TCO 235

Lab fee: \$20.00

TCO 245 HTML-Based Online Documentation (W, SU) 5 credits

This course introduces students to all aspects of creating HTML-based online documentation without the use of an HTML authoring tool. Students will learn about the various phases of creating HTML-based online documentation: planning, designing, organizing, developing, publishing, testing and redesigning.

Lecture: 5 hours – Lab: 0 hours

Prerequisite: TCO 214

Lab fee: \$5.00

TCO 250 Capstone in Technical Communication (A, W, SP, SU) 3 credits

In this course, students will be required to demonstrate both the overall competency and quality workmanship expected of professionals in the technical communication field. Students will work individually and in collaboration to solve problems of technical writing, editing, and presentations, and on the study and implementation of projects normally assigned to entry-level technical communicators. The course can only be taken during the final quarter, prior to graduation.

Lecture: 2 hours – Lab: 3 hours

Prerequisite: Permission of instructor

Lab fee: \$5.00

TCO 260 Career Development (A, SP) 1 credit

In this course, students prepare a professional portfolio, including a resume developed from the student's previous academic work experience. Students are required to review their portfolios informally and through formal oral presentations. Students will learn how to carry out company research and apply that research to targeted resumes, letters of application, and interview situations. This course must be completed within the final four quarters of the student's program.

Lecture: 1 hour – Lab: 0 hours

Prerequisite: Permission of instructor

Lab fee: \$5.00

TCO 290 Industry Internship (A, W, SP, SU) 1-4 credits

In this course, students are engaged in work specifically related to the technical communication field as employees in business or industry. Students are responsible for arranging the internship and must submit a written proposal to the Technical Communication program coordinator for approval no later than two quarters prior to becoming an intern. During the internship, the student must keep a written record of job responsibilities and projects. A formal written report must be accompanied by a written evaluation of the student's performance by his/her supervisor. One credit hour is equal to one hundred (100) clock hours on the job. The four credits may be spread over more than one quarter.

Prerequisites: TCO 101, TCO 203, TCO 204, and permission from the program coordinator of the Technical Communication Program. A GPA of "B" or higher in TCO courses

Lab fee: \$5.00

TCO 297, 298, 299 Special Topics in Technical Communication (On Demand) 1-5 credits

Special topics in technical communication designed to meet specific needs.

Lecture: 5 hours – Lab: 0 hours

Lab fee: \$5.00

Theater (THEA)

(Also see Communication Skills and English)

Note: Courses taught at a distance (Distance Learning [DL]) may have a higher lab fee than traditionally taught courses.

THEA 100 Introduction to the Theater (A, W, SP, SU,–DL) 5 credits

The course is designed to help students bring critical thinking skills into their experience as theatergoers. Students will be introduced to the theater arts—acting, directing, and design. Students will survey the history of Western theater, focusing on the art as a reflection of society's changing social and cultural values. Plays representing several genres and historical periods will be read and discussed. Writing assignments include critical

reviews of plays attended.
Lecture: 5 hours – Lab: 0 hours
Prerequisite: ENGL 101 or ENGL 111
Lab fee: \$5.00; \$25.00 for DL

THEA 180 Theater Practicum (A, W, SP, SU) 3 credits
Supervised practical experience in two or more of the following areas: acting, lighting, set, sound, costuming, house management, stage managing, or directing. Enrollment is limited to students who have been cast in a theater production on campus or who have been selected to work on technical areas of the production. With the advanced approval of the instructor, credit can be earned by working on off-campus theater productions. Repeatable to nine credits.
Lecture: 0 hours – Lab: 9 hours
Prerequisites: THEA 100 and permission of instructor
Lab fee: \$5.00

THEA 205 Technical Production Practicum (A, W, SP, SU) 3 credits
Experience in technical production activities for a theater production. Students fulfill their role as a crew member by exploring a play script and participating in one or more technical areas: lighting design; hanging, focusing, and light board operation; sound design decisions and implementation; stage managing; costume design; building and pulling costumes for production; basic stagecraft; prop management; and publicity. Entails an understanding of budget and time constraints, time management, and an appreciation for theater as a collaborative art. Course is repeatable to 9 credits.
Lecture: 1 hour Lab: 4 hours
Prerequisite: THEA 100
Lab fee: \$5.00

THEA 210 Technical Production Fundamentals: Stage Lighting (SP) 3 credits
An introduction to the basic principles and functions of stage lighting. Experience in creating a lighting design, hanging and focusing sighting instruments, and executing the design with a computer control board. Brief overview of the work of other members of the production staff with whom a lighting designer collaborates.
Lecture: 1 hour – Lab: 4 hours
Prerequisite: THEA 100 or permission of instructor
Lab fee: \$ 3.00

THEA 215 Fundamentals of Script Analysis (W) 3 credits
An intensive study of the play script as a basis for production. Students learn the basic principles and challenges of script analysis; techniques for assessing a script from the diverse perspectives of designers, directors, and performers; various modes of interpretation, including traditional and contemporary forms; and ways to effectively communicate critical positions, both written and orally.
Lecture: 3 hours Lab: 0 hours
Prerequisite: THEA 100
Lab fee: \$5.00

THEA 231 Literature for the Theater I (W) 3 credits
A survey of selected world drama from the classical Greek period through the 17th century. The focus is on the plays as potential theater.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: ENGL 101 or 111, THEA 100
Lab fee: \$3.00

THEA 232 Literature for the Theater II (SP) 3 credits
A survey of selected Western drama from the eighteenth century through the mid-nineteenth century. The focus is on the plays as potential theater.
Lecture: 3 hours – Lab: 0 hours
Prerequisites: ENGL 101 or 111, THEA 100
Lab fee: \$ 3.00

THEA 233 Literature for the Theater III (SU) 3 credits
A survey of selected Western drama from the mid-nineteenth century to the present. The focus is on the plays as potential theater.
Lecture: 3 hours – Lab: 0 hours
Prerequisites or corequisites: ENGL 101 or ENGL 111, THEA 100
Lab fee: \$3.00

THEA 280 Fundamentals of Acting (A, W, SP, SU) 3 credits
Introduction to the basic principles of stage acting with a focus on practical experience. Areas of emphasis include stage movement, vocal delivery, body language, concentration techniques, and basic script analysis and scoring.
Lecture: 1 hour – Lab: 4 hours
Prerequisite: THEA 100 or permission of instructor.
Lab fee: \$3.00

THEA Writing Plays (SP) 5 credits
(See ENGL 283)

THEA 290 Capstone Experience in Theater (SU) 3 credits
Fulfills the capstone requirement for Associate of Arts and Associate of Science degree students at Columbus State. Students will carry out and present a major project in theater—in performance, technical theater, or research. Students will complete a personal portfolio covering their studies in theater and related areas.
Lecture: 0 hours – Lab: 6 hours
Prerequisite: 75 credits toward the Associate of Arts or Associate of Science degree, including at least 12 credits in THEA beyond THEA 100
Lab fee: \$10.00

THEA 297- 298-299 Special Topics in Theater (On Demand) 1–5 credits
Special Topics in Theater is designed to meet specific needs.
Lecture: 1 hour – Lab: Hours vary
Prerequisite: Varies

Veterinary Technology (VET)

VET 101 Animal Nutrition (A,–DL) 3 credits
This course focuses on fundamental animal nutrition for domestic species, including caloric and nutrient requirements, and feeding techniques. The student will learn to educate clients on the nutritional needs of various animal species and explain the necessity and purpose of veterinary prescription diets in the management of diseases.
Lecture: 3 hours – Lab: 0 hours
Prerequisite: Admission to the program
Corequisites: VET 102, VET 114
Lab fee: \$15.00

VET 102 Laboratory Animal Medicine (A) 2 credits
An introduction to laboratory animal medicine and management, including basic husbandry, common diseases, and treatment protocols for various laboratory animal species and pocket pets. The student will learn the scientific names and primary use of common laboratory animals and will practice restraint, sexing, appropriate methods of venipuncture, administration of medications, and anesthetic techniques.
Lecture: 1 hour – Lab: 2 hours
Prerequisite: Admission to the program
Corequisites: VET 101, VET 114
Lab Fee: \$90.00

VET 114 Client Relations (A) 2 credits
This course will familiarize the student with common business procedures used in veterinary practices, including fundamental record-keeping and

medicolegal requirements. The role of the veterinary technician as a member of the veterinary health care team and client educator is addressed. Veterinary practice management, methods for improved client communication, and dealing with difficult clients are explored. The student will learn basic animal training methods and how to assist clients with the resolution of common animal behavior problems.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: Admission to program

Corequisite: VET 102

Lab fee: \$15.00

VET 122 Veterinary Parasitology (W,-DL) 3 credits

An introduction to the common internal and external parasites of domestic animals, including scientific nomenclature, life cycles, common methods of identification, and the treatment and/or prevention of these parasites.

Lecture: 2 hours – Lab: 2 hours

Prerequisite: VET 102

Lab fee: \$90.00

VET 124 Principles of Veterinary Radiology (W, SP) 2 credits

In this course, students learn the basic principles of x-ray production, radiographic positioning, x-ray machine operation, radiographic technique, and film processing. Radiation safety and proper use of protective equipment is emphasized. Special radiographic procedures and technique evaluation are thoroughly explored.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: BIO 261

VET 126 Principles of Veterinary Anesthesia (W) 4 credits

An introduction to veterinary anesthesia that correlates principles of animal physiology as it pertains to anesthetic agents. Students will learn patient preanesthetic evaluation, properties and uses of preanesthetic and general anesthetic agents, pain recognition and management, principles of fluid therapy, and dosage calculations. Patient monitoring, safe anesthetic equipment utilization, and handling anesthetic emergencies will also be emphasized.

Lecture: 3 hours – Lab: 2 hours

Corequisite: BIO 262

Lab fee: \$15.00

VET 131 Veterinary Anatomy and Physiology (SP) 3 credits

This course will provide a clinically relevant systems approach to the comparative anatomy and physiology of the canine, bovine, equine and feline species, including the circulatory, respiratory, digestive, muscular, skeletal, nervous, endocrine, exocrine, and urogenital systems. A brief presentation of avian anatomy and physiology is included.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: BIO 261, BIO 262

Lab fee: \$15.00

VET 133 Clinical Application I (SP, SU) 3 credits

Laboratory exercises for VET 138, VET 124 and VET 126. In this course, students learn how to perform fundamental techniques commonly used in small animal veterinary practices, including physical examination, surgical preparation, anesthesia, radiology, venipuncture, dental prophylaxis, bandaging and splint application, administration of medical treatments, and record-keeping.

Lecture: 0 hours – Lab: 6 hours

Prerequisites: VET 124, VET 126 and MATH 100

Corequisite: VET 138

Lab fee: \$90.00

VET 135 Veterinary Hematology (SP, SU,-DL) 5 credits

This course is designed to acquaint students with the equipment and techniques required to utilize blood as a diagnostic tool. Students will perform complete blood counts on a variety of domestic animal species. Blood smears are prepared and studied for the identification of blood cells that aid in the diagnosis of anemias and various other disease states.

Recognition of normal versus abnormal cell morphology will be stressed. Students who successfully complete this course should be able to perform complete blood counts in a veterinary clinical setting.

Lecture: 2 hours – Lab: 6 hours

Prerequisite: BIO 262

Lab fee: \$90.00

VET 136 Animal Health and Disease I (SP, SU) 3 credits

Using a systems approach, the student will learn the more frequently encountered diseases of dogs and cats, including the disease name, etiology and pathogenesis, history and clinical signs, diagnosis and treatment, prevention, and zoonotic potential. Vaccination protocols commonly used in small animal veterinary practices will be covered.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: VET 102, VET 114 and BIO 262

Lab fee: \$15.00

VET 138 Veterinary Surgical Techniques (SP, SU) 3 credits

In this course, students learn the fundamentals of routine veterinary surgical procedures, including patient preparation, identification of instruments, preparation of surgical packs, methods of sterilization, suture materials, and suture patterns. Preanesthetic laboratory testing, postoperative patient care, and client follow-up instructions are discussed.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: VET 102 and BIO 261

Lab fee: \$10.00

VET 254 Clinical Seminar I (A, SU, DL) 2 credits

This course focuses on issues related to the students' clinical experiences, including pet loss, client grief, euthanasia, problem solving models and change strategies. Companion animals as family members and the importance of the human-companion animal bond are explored.

Lecture: 2 hours – Lab: 0 hours

Prerequisites: All 100 level VET courses

Corequisite: VET 291

VET 262 Veterinary Pharmacology (A, W) 3 credits

This course will provide an overview of veterinary pharmacology and therapeutics, including a basic understanding of pharmacokinetics, terminology, prescription writing, drug classifications, indications for drug use, and methods of administration. Pharmacy management, controlled substance use and regulations, and ethical behavior when handling pharmaceutical agents will be stressed.

Lecture: 3 hours – Lab: 0 hours

Prerequisites: MATH 100 and VET 136

Lab fee: \$20.00

VET 263 Clinical Application II (A, W, SU) 3 credits

This is a capstone course designed for students to perform technical skills commonly used in small animal veterinary practices, including medical record maintenance, physical examination, administration of fluids and medications, preanesthetic evaluation, general anesthetic administration and recovery, surgical preparation, splint application, dental prophylaxis, radiographic procedures, phlebotomy and laboratory techniques.

Lecture: 0 hours – Lab: 6 hours

Prerequisites: All 100 level VET courses

Lab fee: \$90.00

VET 266 Animal Health and Disease II (A, W, SP, SU,-DL) 3 credits

This course familiarizes the student with the most common diseases of horses, food animals, and camelid species. Husbandry, vaccination protocols, nutrition, breeding, and management for preventive health care are also covered.

Lecture: 3 hours – Lab: 0 hours

Prerequisite: VET 136

Lab fee: \$10.00

VET 267 Veterinary Urinalysis and Clinical Chemistry (A, W,–DL) **4 credits**

An introduction to the physical, chemical, and microscopic evaluation of urine and blood serum. Students will perform routine veterinary urinalysis and clinical chemistry procedures on a variety of animal species, and determine normal versus abnormal constituents. Students will become familiar with the general indications for performing various blood chemistries and understand the significance of elevated values in pathological specimens.

Lecture: 2 hours – Lab: 4 hours

Prerequisite: VET 135

Lab fee: \$90.00

VET 269 Veterinary Microbiology (A, W,–DL) **4 credits**

This course is a practical introduction to the laboratory identification of microbial agents associated with diseases in various animal species. Students perform techniques necessary to isolate, identify, and evaluate the presence of clinically significant microorganisms.

Lecture: 2 hours – Lab: 4 hours

Prerequisites: VET 135 and VET 136

Lab fee: \$90.00

VET 274 Clinical Seminar II (W, SP,–DL) **2 credits**

A continuation of VET 254, that addresses issues emanating from the students' clinical experiences. Students are prepared for employment as veterinary technicians through simulated job interviews, resume preparation, and discussion of employment strategies. The role of the veterinary technician in the community is explored. Applications for registration with the Ohio Veterinary Medical Licensing Board are distributed and the Ohio Veterinary Practice Act pertaining to veterinary technicians is discussed.

Lecture: 2 hours – Lab: 0 hours

Prerequisite: VET 291

Corequisite: VET 293

VET 275 Seminar A (A) **1 credit**

This course focuses on issues related to the students' clinical experiences, including pet loss, client grief, euthanasia, and client assistance during pet loss. Companion animals as family members and the importance of the human-companion animal bond are explored. Special topics in veterinary medicine are discussed.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: VET 133; evening program registration

Corequisite: VET 294

VET 276 Seminar B (W) **1 credit**

A continuation of VET 275.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: VET 275; evening program registration

Corequisite: VET 295

VET 277 Seminar C (SP) **1 credit**

This course addresses issues emanating from the students' clinical experiences. Students are prepared for employment as veterinary technicians through simulated job interviews, resume preparation and discussion of employment strategies. The role of the veterinary technician in the community is explored. Applications for registration with the Ohio Veterinary Medical Licensing Board are distributed and the Ohio Veterinary Practice Act pertaining to veterinary technicians is examined.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: VET 276; evening program registration

Corequisite: VET 296

VET 278 Seminar D (SU) **1 credit**

A continuation of VET 277.

Lecture: 1 hour – Lab: 0 hours

Prerequisites: VET 277; evening program registration

Corequisite: VET 297

VET 291 Clinical Experience I (A, SU) **6 credits**

Observation and practical application of techniques used in veterinary medicine. Students are assigned to various veterinary facilities, including The Ohio State University Veterinary Teaching Hospital, private veterinary practices, veterinary emergency hospitals, research centers, diagnostic laboratories, and zoos.

Lecture: 0 hours – Lab: 30 hours

Prerequisites: All 100 level VET courses

Lab fee: \$90.00

VET 293 Clinical Experience II (W, SP) **6 credits**

A continuation of VET 291.

Lecture: 0 hours – Lab: 30 hours

Prerequisites: All VET courses except VET 266 and VET 274

Lab fee: \$90.00

VET 294 Clinical Experience A (A) **3 credits**

Observation and practical application of techniques used in veterinary medicine, designed for the evening Veterinary Technology program. Students are assigned to various veterinary facilities, including The Ohio State University Veterinary Teaching Hospital, private veterinary practices, veterinary emergency hospitals, research centers, and diagnostic laboratories.

Lecture: 0 hours – Lab: 15 hours

Prerequisites: All 100 level VET courses; evening program registration

Lab fee: \$45.00

VET 295 Clinical Experience B (W) **3 credits**

A continuation of VET 294, designed for the evening program student.

Lecture: 0 hours – Lab: 15 hours

Prerequisites: VET 294; evening program registration

Lab fee: \$45.00

VET 296 Clinical Experience C (SP) **3 credits**

A continuation of VET 295, designed for the evening program student.

Lecture: 0 hours – Lab: 15 hours

Prerequisites: VET 295; evening program registration

Lab fee: \$45.00

VET 297 Clinical Experience D (SU) **3 credits**

A continuation of VET 296, designed for the evening program student.

Lecture: 0 hours – Lab: 15 hours

Prerequisite: VET 296; evening program registration

Lab fee: \$45.00

DIRECTORIES

and Index

Pages 329-352



Directories and Index

BOARD OF TRUSTEES

Suzanne Stilson Edgar, Chairman	.....	President
		Surface Style
Jeffrey L. Scheiman, Vice Chairman	.....	Chairman/CEO
		SOS Video Communications
William A. Antonoplos	.....	President
		Capitol Square Consulting, Inc.
William J. Dolan	.....	CEO
		Childrens' Hunger Alliance
Susan C. Finn, Ph.D.	.....	President
		Finn Park and Associates
Michael E. Flowers, Esq.	.....	Partner
		Bricker and Eckler LLP
Paula A. Inniss	.....	President
		Ohio Full Court Press
Michael C. Keller	.....	Executive V.P. & Chief Information Officer
		Nationwide
Priscilla D. Mead	.....	Former Ohio State Senator

ADMINISTRATION

OFFICE OF THE PRESIDENT

M. Valeriana Moeller, Ph.D.	President
-----------------------------	-------	-----------

PROVOST, LEARNING SYSTEMS

Patricia Kay Adkins, Ed.D.	Provost
----------------------------	-------	---------

OFFICE OF THE VICE PRESIDENT FOR BUSINESS AND ADMINISTRATIVE SERVICES

Terri Gehr	Senior Vice President and CFO
------------	-------	-------------------------------

OFFICE OF THE DEVELOPMENT FOUNDATION

Matt Kelly	Executive Director
------------	-------	--------------------

OFFICE OF THE VICE PRESIDENT FOR HUMAN RESOURCES

Tim Wagner	Vice President
------------	-------	----------------

OFFICE OF THE VICE PRESIDENT FOR INFORMATION TECHNOLOGY

Hamid Danesh	Vice President
--------------	-------	----------------

OFFICE OF THE VICE PRESIDENT FOR INSTITUTIONAL ADVANCEMENT

William Kopp	Vice President
--------------	-------	----------------

OFFICE OF THE VICE PRESIDENT FOR KNOWLEDGE RESOURCES AND PLANNING

Deborah D. Coleman, Ph.D.	Vice President
---------------------------	-------	----------------

ADMINISTRATIVE OFFICES

ADMISSIONS

Tari Blaney	Director
-------------	-------	----------

ADVISING SERVICES

Ben Williams, Ph.D.	Director
---------------------	-------	----------

ARTS AND SCIENCES DIVISION

John Cooley, Ph.D.	Dean
--------------------	-------	------

AUXILIARY SERVICES

Glenda K. Sanders, J.D.	.....	Director
William Silcott	.....	Supervisor, Office Services
Stacey Mulinex	.....	Supervisor, Retail Sales/Marketing
Lisa Briggs	.....	Supervisor, Auxiliary Services
Jeff Pruzinsky	.....	General Manager, Bridgeview Golf Course

BUSINESS SERVICES

Aletha Shipley	.....	Director
Brad Farmer	.....	Supervisor, Purchasing/Accounts Payable
Ann Helfrich	.....	Supervisor, General Accounting
Darlene Evans	.....	Supervisor of Student Accounting
Paul Smith	.....	Supervisor of Student Accounting
Jan Ellis	.....	Supervisor of Grants, Contracts and Loans
Annetta Keller	.....	Supervisor, Cashier's Office

CAREER ASSISTANCE CENTER (ACLOCHÉ)

David Fields	Career Assistance Center
--------------	-------	--------------------------

CAREER AND TECHNICAL PROGRAMS

Polly Owen, Ph.D.	Dean
-------------------	-------	------

CHILD DEVELOPMENT CENTER

Jennifer Perkins	Director
------------------	-------	----------

COMMUNICATION TECHNOLOGIES/PC SERVICES

James Beidler	.....	Director
Connie Feeney	.....	Supervisor, PC Services
Chris Scanlon	.....	Supervisor, Network Administration

COMMUNITY EDUCATION AND WORKFORCE DEVELOPMENT

Vacant	.....	Dean
Cheryl Hay	.....	Director of Business and Industry Training Services
Fred Baker, J.D.	.....	Administrator of Continuing Professional Education
Nancy Case	.....	Administrator of Transitional Workforce

COUNSELING SERVICES

Wayne Cocchi	Director
--------------	-------	----------

DATA CENTER

Etienne Martin	.....	Director
Mike Jacobs	.....	Supervisor, Application Programming
Terry Rockwell	.....	Supervisor, Telecommunications
Steve Wolfinger	.....	Supervisor, Enterprise Management

DISABILITY SERVICES

Wayne Cocchi	.....	Director
Nellie Nelson	.....	Assistant Director, Disability Services

DIVERSITY/STUDY ABROAD/TRIO PROGRAMS

Renée Hampton	Director
---------------	-------	----------

EDUCATIONAL RESOURCES CENTER (LIBRARY)

Bruce Massis	.....	Director
Martin Barry	.....	Supervisor, AV Services
Nick Cenci	.....	Supervisor, Video Production
Kim Leggett	.....	Supervisor, Reference Services

ENROLLMENT SERVICES

Marty Maliweski	Dean
-----------------	-------	------

FACILITIES SERVICES

Paul Goggin	.....	Director
James Spencer	.....	Assistant Director Physical Plant
Chris Terry	.....	Supervisor of Building Services
Michael Ryan	.....	Supervisor of Grounds

FINANCIAL AID

Vacant..... Director
Suzanne Von Ahn..... Assistant Director

HUMAN RESOURCES

Tim Wagner..... Vice President
Terri Williams Miller..... Assistant Director, Human Resources
Lori McKenzie..... Assistant Director, Human Capacity Development

INSTRUCTIONAL SERVICES

Tom Erney..... Dean
Jay Benedict..... Administrator of Curriculum Management
Elizabeth Daugherty Ph.D..... Administrator of Assessment
Leslie King, Ph.D..... Admin.of Instructional Technology/Distance Learning
Susan Norris-Berry..... Administrator Off-Campus Programs
Suzanne Patzer..... Supervisor, T.L.R.C.
Michelle Parks..... Supervisor, Testing
Yvonne Watson..... Supervisor, Off-Campus Programs

KNOWLEDGE RESOURCES AND PLANNING

Deborah D. Coleman, Ph.D..... Vice President
Brian Seeger..... Director

K-12 INITIATIVES

Laurie Johns..... Administrator

PAYROLL OPERATIONS

Lou Ann Carman..... Supervisor

PLANNING AND CONSTRUCTION

George Arnold..... Assistant Director

PUBLIC SAFETY

John Nestor, Ph.D..... Director
Terry Cooke..... Supervisor
Kathy Wolfangel..... Supervisor, Communications
Babette Money..... Supervisor, Safety and Security

RECORDS AND REGISTRATION/STUDENT ASSISTANCE CENTER

Regina R. Peal, Ph.D..... Registrar
Margaret Hawkins..... Associate Registrar
Jacqueline Stewart..... Associate Registrar

STUDENT ACTIVITIES AND ATHLETICS

Timeka Thomas-Rashid..... Director
Mary Ferguson, Ph.D..... Supervisor, Athletics
Heather Borland..... Supervisor, Student and Recreational Activities

STUDENT LIFE

Janet Rogers, Ph.D..... Dean

TECH-PREP/HEART OF OHIO CONSORTIUM

Claude Graves..... Director

TELEPHONE INFORMATION CENTER

Nina Reese..... Director

FACULTY AND ADVISORY MEMBERS

ACCOUNTING

Chairperson, Angelo J. Frole, B.S., *University of Dayton, M.A., Central Michigan University*

Coordinator, Professor D.J. Carmell, B.S, *The Ohio State University, B.S., Franklin University, M.B.A., Xavier University*

Faculty, Assistant Professor John Gabelman, B.A., *The Ohio State University*; Professor Patricia Parker, C.P.A., B.S., *University of Louisville, M.A., The Ohio State University*; Instructor Brad Trimble, C.P.A., B.A., *Ohio Wesleyan University*

Advisory Committee

Carrie Clay, CPA..... Price Waterhouse
Dennis Hanzel, CPA..... Internal Revenue Service
Nora Kish, CPA..... Sole Practitioner
Steven Martin, (CPA Inactive)..... Blaugrund, Herbert & Martin, Inc.
Alan Rogers, CPA..... Insta-Pay, Inc.
Greg Sutton..... Grange Mutual Casualty Company
John Wronski, CPA..... Internal Revenue Service

APPLIED TECHNOLOGIES

Chairperson, Dr. Andrew A. Rezin, B.A., *Kent State University, M.A., The Ohio State University, Ph.D., The Ohio State University*

Coordinator, J.D. White

APPRAISAL

Chairperson, Dr. Andrew A. Rezin, B.A., *Kent State University, M.A., The Ohio State University, Ph.D., The Ohio State University*

Coordinator, Tom Barrowman, B.A. *Franklin University*

Advisory Committee

Gary Burns..... Real Property Analysts
Thomas Francis Sr..... Real Property Analysts
James Gonya..... Gonya & Associates
Keith Harrison..... Appraise Ohio
John Hentz..... R/W Specialists, Inc
Anthony F. Mollica..... Anthony Mollica & Associates
Richard Royer..... Kohr, Royer, Griffith
Cathy Schirtzinger..... Valuation Resources
Richard Vannatta..... Vannatta Brothers
Kenneth Wilson..... Nash Wilson Associates Inc.

ARCHITECTURE

Chairperson, Antoinette M. Baldin, B.S., *Purdue University, M.B.A., Lewis University, M.S., The Ohio State University*

Coordinators, Associate Professor Robert D. Ritchie, Architect, B.S., M. Arch., *The Ohio State University*; Professor Thomas G. Robbins, Architect, NCARB, B.Arch., *University of Illinois*

Advisory Committee

Gary Bruck..... Sullivan Bruck Architects, Inc.
Rande Buckle..... Wendy's International
Daniel Cline, AIA..... Daniel Cline & Associates
Gregg Gaber..... Gaber & Associates
Kevin Harrison..... Firestone, Jaros, Mullin, Inc.
David Hughes..... David Hughes Architects
Philip R. Johnson, AIA..... Philip R. Johnson, AIA
Michael Majewski, AIA..... Homewood Corporation
Kay Onwukwe..... HKI Associates, Inc.
Sam Pegg..... Karlsberger & Associates, Architects, Inc.
David Ruth..... ARC-cetera
Thomas O. Schnell, AIA..... Wandell & Schnell Architects, Inc.
Rob Smith..... Schooley Caldwell Associates

AUTOMOTIVE TECHNOLOGY

Chairperson, Dr. Andrew A. Rezin, B.A., *Kent State University, M.A., The Ohio State University, Ph.D., The Ohio State University*

Faculty/Coordinators, Associate Professor Brooke Mossgrove, B.S., *Western Michigan University*; Associate Professor Bill Warner, A.A.S., *Ohio Technical Institute, B.A., Franklin University*; Instructor Mark Mitchell, A.A.S., *Columbus State Community College*; Ford ASSET Coordinator, Chuck Wilson, YAATC

Coordinator, Jim Brady

Advisory Committee

Dan Bryan..... Ricart Automotive

Lisa Compton	Automotive Service Assoc. of Ohio
Milt Erb.....	Columbus Cadillac
Scott Greenhalgh	Germain Auto Group
Wendell Jahr.....	Dennis Autopoint
Bill Linsenmeyer	Ohio Auto Club, AAA
Mike Paul	E.T. Paul Co.
Ron Stein	Clintonville Service Center
Don Zaiser	Petty's Auto Service

Ford ASSET Advisory Committee

Don Andres	Ricart Ford
Bob Bishop.....	Graham Ford
Larry Burkhardt	Bob Chapman Ford
John Burton.....	Ford Motor Company
Rick Elliott.....	Ford Motor Company
Steve Kesler	Bobb-Boyd LM
Bob Masheter.....	Masheter Ford
Pete Plagman.....	Jim Keim Ford
Marc Stuart.....	Ford Motor Company
Ron Tackett	Ricart Ford
Kurt Tekaucic.....	Jim Keim Ford
Julie Williams.....	Germain Ford
Kevin Wilush.....	Krieger Ford

AVIATION MAINTENANCE TECHNOLOGY

Chairperson, Dick Bickerstaff, B.A., *Youngstown State University, M.A., The Ohio State University*

Coordinator, Assistant Professor Gene L. Sprang, B.B.A., *Ohio University*

Faculty, Assistant Professor Mark Reed, A.A.S., *Columbus Technical Institute*; Assistant Professor Charles Kassor, A&P, A.A.S., *Columbus State Community College*; Assistant Professor Jeffrey Gruber, A.A.S., *Columbus State Community College*

Advisory Committee

Rick Chenault.....	Wolfe Industries
Tom Fullerton.....	NetJets, Inc.
Luke Polczynski.....	Lane Aviation Corp.
Tim Ritchie	Limited Brands Inc.
Jay Murray	American Eagle Airlines
George Miconi	American Eagle Airlines
Tony Barrell	The Ohio State University

BIOLOGICAL AND PHYSICAL SCIENCES DEPARTMENT

Chairperson, Laurence P. Mayer, B.S., M.S., Ph.D., *The Ohio State University*

Faculty, Professor Jean-claude Ba, M.S., *The Ohio State University, Ph.D., Montpellier University*; Assistant Professor Michael Bailey, B.S., *University of Missouri-Columbia, M.S. & Ph.D., The Ohio State University*; Assistant Professor Sharon Rohr Barnewall, B.S., M.S., D.V.M., *The Ohio State University*; Assistant Professor John Blaha, B.S., *Iowa State University, M.S. & Ph.D., Kansas State University*; Instructor, Rachel Burroughs, B.S. & M.S. *Waseda University, Tokyo*; Assistant Professor Francis Cobbina, B.S., *University of Science and Technology, Ghana, M.S., Miami University, Oxford*; Associate Professor Elle Feth, B.S., *Ohio University, M.Ed., University of Pittsburgh, M.S., Purdue University*; Instructor Kent Fisher, B.S., *Earlham, M.S. & Ph.D., The Ohio State University*; Assistant Professor John W. Francis, B.Sc. "Special", *The University of the West Indies, Ph.D., Loyola University of Chicago*; Assistant Professor Charlie Gallucci, B.S., *Rensselaer Polytechnic Institute, Ph.D., University of Massachusetts*; Instructor Michael Hailu, B.S. & M.S., *University of Asmara, M.S., University of Colorado at Denver*; Assistant Professor Myung Han, B.S., *Seoul National University, M.S., University of Alaska, Ph.D., Oregon State University*; Associate Professor Morteza Javadi, B.S., *Hamadan College, M.S., Central Missouri State University, Ph.D., The Ohio State University*; Associate Professor Amine Kidane, B.S., *University of Asmara, M.S., University of Minnesota, Ph.D., University of Wales*; Assistant Professor Nardos Lijam, B.S. *University of Asmara, M.S.C., University College of North Wales, Ph.D., Clarkson University*; Associate Professor Sue Longenbaker, B.S., *St. Mary's College of Notre Dame, M.S., The Ohio State University*; Professor Marc Lord, B.A., *Earlham College, M.A., Washington University, Ph.D., University of Missouri-St. Louis*; Professor Wendy H. McCullen-Vermillion, B.S., M.S., D.V.M., *The Ohio State University*; Instructor Randy Mogg, B.S., *Texas A&M University, Ph.D., Southwestern Medical Center, Dallas*; Assistant Professor Michael E. Rennekamp, B.S., *Iowa State University, Ph.D., Kansas State University*; Assistant Professor Dr. J. G. Richardson, B.A., *Denison; M.S., The Ohio State University; Ph.D., The Ohio State University*; Professor Ludwig Sprandel, B.S., *University of Scranton, Ph.D., The Ohio State University*; Associate Professor Michael Squires, B.S., M.S., Ph.D., *The Ohio State University*; Assistant Professor Martha Susheston B.S., *Western Ky University, M.S. & Ph.D., The Ohio State University*

BUSINESS MANAGEMENT

Chairperson, Angelo J. Frole, B.S., *University of Dayton, M.A., Central Michigan University*

Coordinator, Assistant Professor Charles R. Foley, B.S. and M.B.A., *The Ohio State University*

Faculty, Assistant Professor Reuel Barksdale, B.S., *Franklin University, M.S.A., Central Michigan University*; Assistant Professor Richard C. Bartlett, B.S., *SUNY at Cortland, M.A., SUNY at Plattsburg, Ph.D., Ohio University*; Assistant Professor Carmen Daniels, B.S., *Ohio University, M.B.A., Cleveland State University*; Assistant Professor Gil Feiertag, B.C., *Bliss College, M.S.A., Central Michigan University*; Instructor Les Helms, B.S., *Franklin University, M.B.A., University of Dayton*

Advisory Committee

Dr. L. Richard Bradley.....	Worthington Schools
Peter D. Clifford.....	Advanced Leadership Services
Joe E. Frash.....	Associated Builders & Contractors, Inc.
Richard Mueller	American Electric Power
Larry Peterson.....	McDonald, Cassell and Bassett Inc.
John Randall.....	Modern Office Methods
Dawn Snyder, Ph.D.....	Dawn Synder Associates, Inc.
Mark Weilbacher.....	Mid-Ohio Training Consortium

CIVIL ENGINEERING TECHNOLOGY

Chairperson, Antoinette M. Baldin, B.S., *Purdue University, M.B.A., Lewis University, M.S., The Ohio State University*

Coordinator, Professor Robert J. Mergel, P.E., P.S., B.S., *The Ohio State University, M.Ed., Ohio University*

Faculty, Assistant Professor Dallas P. Morlan, P.S., A.S., *Belmont Technical College*

Advisory Committee

Joseph S. Bolzenius, P.E., P.S.	Dynotec Inc.
Jerry Dailey, P.E.	Stilson Consulting Group
Terry Hawk, P.S.	Matmar, Inc.
Nicholas W. McCullough, P.E.	Hull & Associates, Inc.
A.J. Myers, P.S.	Myers Surveying Co.
Dave Pearson, P.S.	Franklin County Engineers Office

COMPUTER INFORMATION TECHNOLOGY

Chairperson, Mary A. Vaughn, A.B., *St. Peter's College, M.A., The Ohio State University*

Faculty, Instructor Debra Dyer-Welsh, M.Ed., *Ashland University, B.S., Franklin University*; Assistant Professor Thomas (Ty) Fogle, M.A., *The Ohio State University, B.A., Ohio University, A+ Certified*; Assistant Professor Mary Insabella, M.S., *University of Pittsburgh, B.S., University of Pittsburgh*; Professor Jeffrey Mellman, M.Ed., *Ohio University, B.S., The Ohio State University*; Assistant Professor Patricia Opong, M.S., *Central Michigan University, B.S., Ohio University*; Associate Professor James Reed, M.B.A., *University of Dayton, B.S., B.A., Franklin University*; Professor Gloria Rogiers, M.A., *Central Michigan University, B.A., University of the Virgin Islands*

Advisory Committee

Tony Castro	Nationwide Insurance
David Coffman	Nationwide Insurance
Jim Gallo	JCC
Terry Kelly	JP Morgan Chase
Mike Lester	Ross Labs
John Sisinger.....	Franklin County Children Services
George Walter	OCLC

COMMUNICATION SKILLS DEPARTMENT

Chairperson, Lisa R. Schneider, B.A., *Hiram College, M.A., The Ohio State University*

Faculty, Professor Steven A. Abbott, B.A., M.A., *The Ohio State University*; Assistant Professor Judith Anderson, B.A., *University of Michigan, M.A., M.F.A., The Ohio State University*; Assistant Professor Deborah Bertsch, B.A., *Northern Kentucky University, M.A. Miami University*; Professor Rita J. Bova, B.A., M.A., *The Ohio State University, Grad. Dip., West Australian Technical Institute, Ph.D., The Ohio State University*; Professor Crystal Clark, B.A., M.A., *The Ohio State University*; Assistant Professor D. Michael Ehret, B.A., *Mt. Union, M.A., Ph.D., The Ohio State University*; Assistant Professor Ingrid R. Emch, B.A., *Capital University, M.A., The Ohio State University, Ph.D., Union Institute & University*; Assistant Professor Susan E. Flatt, B.A., *University of Florida, M.A., University of Miami*, Instructor Lisa Gordon, B.A., *Capital University, M.A., The Ohio State University*; Professor David A. Grant, B.S., M.A., M.B.A., Ph.D., *The Ohio State University, M.B.A., New York University*; Assistant Professor Douglas Gray, B.A., M.A., *University of Mississippi, M.A., University of Virginia, Ph.D., University of Dallas*; Professor Frances Hale, B.A., *Miami University, M.A., The Ohio State University*; Professor Christiana M. Hopkins, B.S., M.A., *University of Cincinnati*;

Associate Professor Stephen Kaczmarek, B.A., M.A., *The Ohio State University*; Associate Professor Nancy Kephart, B.A., M.A., *The Ohio State University*; Assistant Professor Kip Knott, B.A., *The Ohio State University*, M.F.A., *University of Alaska, Fairbanks*; Professor Sue V. Lape, B.A., M.A., Ph.D., *The Ohio State University*; Professor Robyn N. Lyons-Robinson, B.A., M.A., *The Ohio State University*; Professor Edward J. Martin, B.A., *Otterbein College*, M.A., *Western Illinois University*; Professor Libby A. McGlone, B.A., M.A., *The Ohio State University*; Professor Susan G. Moran, B.A., M.A., *Bowling Green State University*; Assistant Professor Ann Palazo, B.A., *University of Michigan*, M.A., *University of Notre Dame*; Assistant Professor Joan E. Pertrusky, B.A., *Bowling Green University*, M.A., *Pittsburgh State University*; Assistant Professor Rita Rice, B.A., M.A., *The Ohio State University*; Assistant Professor Robert Stein, B.A. *University of Iowa*; M.A., *University of Missouri – Kansas City*; Assistant Professor Rebecca L. Test, B.A., M.A., *The Ohio State University*; Professor Barbara P. Thompson, B.A., *Boston University*, M.A., *The Ohio State University*

CONSTRUCTION MANAGEMENT

Chairperson, Antoinette M. Baldin, B.S., *Purdue University*, M.B.A., *Lewis University*, M.S., *The Ohio State University*

Coordinator, Professor David Busch, B. S., M. A., *The Ohio State University*

Instructor Dean Bortz, B. S., M. A., *The Ohio State University*

Advisory Committee

Jeffrey Calcamuggio Triglyph Construction
 Doug Clase, CSI, CDT PPW/Dupont-Tyvek
 Thad Goodman Georgia-Pacific
 Conrade Hinds Columbus Division of Water
 Wade Hungerford MCR Services, Inc.
 John Igel George J. Igel & Co., Inc.
 Melanie Bunstine Baker & Associates
 Jill Harris Corna/Kokosing Construction Co.
 George A. Patterson Turner Construction Co.
 Aaron Peterson The Paul Peterson Company
 Mark Potnick Ohio Contractors Association
 Dana D. Smoot Smoot Construction

DENTAL HYGIENE

Chairperson, Terrence A. Brown, N.H.A., M.H.S.A., Ph.D., *Ohio University*

Coordinator, Associate Professor Cynthia Evans, R.D.H., B.S. *The Ohio State University*, M.Ed., *Ohio University*

Advisory Committee

Carol Anderson, Ph.D. Dean, OSU College of Dentistry
 Portia J. Bell, D.D.S. Private Practice Dentistry
 Tina M. Campbell, R.D.H. CSCC Alumna
 LeAnn Chilcote Class of 2007, Student Member
 Rob Duffey, A.A.S., CDT Coordinator, Dental Laboratory
 Technology/CSCC
 Marcia Garvey, R.D.H. Private Practice Dental Hygienist
 David Heisel, D.D.S. Columbus Health Department
 Michell J. Ivory, R.D.H. CSCC Alumnus
 Mark Klabunde, D.D.S. Periodontist
 Kimberly H. Oyer, R.D.H. Private Practice Dental Hygienist/Columbus
 Dental Hygiene Association
 Lorrie Ritchey, M.L.H.R. Academic Advisor/CSCC
 Susan Ritzenthaler, R.D.H., M.Ed. Children's Hospital Dental Clinic
 Heidi Smith Class of 2008, Student Member
 Michael Squires, Ph.D. Assistant Professor of Biological and
 Physical Sciences/CSCC
 Susan Strader, R.D.H. Dental Hygienist/Columbus Sealant Program
 Deborah Tennyson, R.D.H. Private Practice Dental Hygienist/Columbus
 Dental Hygiene Association
 Stanley Vermilyea, D.M.D., M.S. Associate Dean for Clinical Affairs,
 OSU College of Dentistry

DENTAL LABORATORY TECHNOLOGY/SMALL BUSINESS MANAGEMENT

Chairperson, Terrence A. Brown, N.H.A., M.H.S.A., Ph.D., *Ohio University*

Coordinator, James R. Duffey, A.A.S., CDT, *Columbus State Community College*

Advisory Committee

Michael Connor, D.D.S. Practicing Dentist
 Bryan Frazier Saturn Dental Supply
 Thom Garrett Garrett Dental Laboratory
 Debbie Karnes, C.D.T. Den-Tech Ceramics
 John Pazar, C.D.T. Pazar Dental

Jack Slagle, C.D.T. Slagle-Kiser Dental Ceramics
 Phil Shepherd, C.D.T. PCS Dental Laboratory

DEVELOPMENTAL EDUCATION DEPARTMENT

Chairperson, Celeste F. Bland, B. S., *Bowling Green State University*, M.A.E., *University of Northern Iowa*

Faculty, Associate Professor Beth Barnett, B.S., *University of Connecticut*, M.A.T., *Sacred Heart University*; Professor Holly H. Finnegan, B.S., M.A., *The Ohio State University*; Associate Professor William David Hall, B.A., M.A., *Marshall University*; Assistant Professor James Kinnach, B.S., *Miami University*, M.Ed., *The Ohio State University*; Assistant Professor Tracy C. Koski, B.S., M.A., *Radford University*; Assistant Professor Brenna Michelis, B.S., *University of North Carolina*, M.A.T., *University of South Carolina*; Assistant Professor Patricia L. Rowe, B.A., *The Ohio State*, EdM., *The State University of New York at Buffalo*; Associate Professor Kelly A. Sanchez, B.S., *Wright State University*, M.A., *The Ohio State University*; Associate Professor John Wallace, B.S.Ed., M.S., *Ohio University*; Instructor Nancy Ziminski, B.A., *State University of New York at Albany*, M.S., *College of Saint Rose*

Staff, Tutor Coordinator Lynn Giese, B.S., *Southern Illinois University*, M.S., *Central Michigan*, Office Associate Annie Peterson, A.A.S., *Columbus State Community College*

DIGITAL DESIGN AND GRAPHICS

Chairperson, Mary Vaughn, A.B., *St. Peter's College*, M.A., *The Ohio State University*

Coordinator, Assistant Professor Gene Burleson, B.F.A., *Columbus College of Art and Design*

Faculty, Instructor Norman Clevenger, B.B.A. *Mount Vernon College of the Nazarene*, MBA, *Ohio Dominican University*

Advisory Committee

Rosalie Bycz Nationwide
 Douglas Covel Lancaster Colony Design
 James A. Cunningham PIANKO
 Carol Ellingson URS Engineering & Architecture
 Jim Hopkins J.F. Hopkins & Associates
 Warren Motts Professional Photographers Association International
 Kathlyn Shadle Adjunct Faculty
 Debbie Santo Kroger
 Al Shuler The Columbus Dispatch
 Shara Skaggs Cardinal Imaging

DIGITAL PHOTOGRAPHY

Chairperson, Mary Vaughn, A.B., *St. Peter's College*, M.A., *The Ohio State University*

EARLY CHILDHOOD DEVELOPMENT

Chairperson, Lenore Schneiderman, A.A.S., *American River Junior College*, B.A., M.S.W., *The Ohio State University LISW*

Coordinator, Assistant Professor Roberta Grawemeyer B.S., M.S. *The Ohio State University*

Faculty, Instructor Mary Lou Guillory, B.S., *Southeastern Louisiana College*, M.Ed. *Cameron University*; Assistant Professor Li Yang, B.S., *East China Normal University*, M.S., *Ohio State University*

Advisory Committee

Carol Ankrom Child Care Regulatory Unit
 Lettie Bozeman ECD Graduate
 Julie Davis Ohio Department of Education
 Shirley Drake Director, C. Ray Williams Early Childhood Center
 Mary Evans Family Counselor
 Stacy Evans Director, Pied Piper Child Care
 Lynn Gallagher Director, Columbus State CDC
 Judy Helfgott Otterbein College
 Betsy Loeb Action for Children
 Kathy Mortimer Franklin Co. MR/DD
 Ann Palmerton Broad St. Presbyterian Church
 Dave Proctor CMAAO Head Start
 Dr. Kimberlee Whaley V.P. of Education, COSI

ELECTRONIC ENGINEERING TECHNOLOGY

Chairperson, Dick Bickerstaff, B.A. *Youngstown State University*, M.A. *The Ohio State University*

Coordinator, Instructor Joan Young, B.A., *Stonehill College*; B.S.E.E., *University of Notre Dame*

Faculty, Keith Sanders, B.A., *Columbia College*; M.A., *University of Central*

Florida

Advisory Committee

Bryan Bartlett	Grace Brethen
Arun Biswas	Worthington Industries
Joe Bowman	Treehaven
Dale Hall	Hall Electronics, Inc.
Marvin Hite	WBNS-TV
Kevin Loving	AEP
Lanny Sims	Lucent, Worthington Industries
Jeff Tinklepaugh	Grant-Riverside Hospital

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY

Chairperson, Dick Bickerstaff, B.A., *Youngstown State University*; M.A., *The Ohio State University*

Faculty and Advisory Committee

See Mechanical Engineering Technology and Electronic Engineering Technology

EMERGENCY MEDICAL SERVICES TECHNOLOGY

Chairperson, Daryl Cullison, A.A.S., *Hocking Technical College*, B.S., *University of Cincinnati*, J.D., *Capital University*

Coordinator, Professor Carolyn A. Steffl, R.N., B.S.N., EMT-P, *Ohio University*

Faculty, Christopher D. Bell, B.A., NREMT-P, *Case Western Reserve University*

Jonathan V. Packer, B.S., EMT-P, *Franklin University*

Special Consultants

James Davis, RN, EMT-P	Hospital Coordinator
Robert Dickson, EMT-P	Field Coordinator
Thomas Gavin, M.D.	Medical Director
Douglas Rund, M.D.	Medical Director

Advisory Committee

Bill Barks, EMT-P	OSU Medical Center
Lt. Paul Burleigh, EMT-P	Franklin Twp. Fire Dept./EMS
Chief James DeConnick, EMT-P	Mifflin Twp. Fire Dept./EMS
Carol Elliott, R.N.	Mt. Carmel East Hospital
James Evans, EMT-P	CSCC Graduate
Asst. Chief Steve Kimple	Washington Twp. Fire Dept./EMS
Capt. Scott Koloff, EMT-P	Upper Arlington Fire Dept./EMS
FF Jim Papenbrock, EMT-P	Worthington Fire Dept./EMS
Capt. Drew Pruden, EMT-P	Madison Twp. Fire Dept./EMS
Assistant Chief John Ross	Westerville Fire Dept./EMS
Capt. Steve Shaner, EMT-P	Grandview Fire Dept./EMS
Denny Swick, RN, EMT-P	Children's Hospital
Kim Thompson, RN	Grady Memorial Hospital

ENVIRONMENTAL SCIENCE, SAFETY AND HEALTH

Chairperson, Antoinette M. Baldin, B.S., *Purdue University*, M.B.A., *Lewis University*, M.S., *The Ohio State University*

Coordinator, Professor Jeffrey K. Bates, B.A., *State University of New York at Buffalo*, M.S., *Bowling Green State University*

Advisory Committee

Jeffrey L Bertacchi	City of Columbus
Barb Brdicka	Consultant
William Carter	The University of Findlay
Daniel N. Leavell, Ph.D.	The Ohio State University
Jay Lehr, Ph.D.	Environmental Education Enterprises
Nicholas S. Minto, Jr.	Turner Construction Company
Cathy Pickrel	Ashland Chemical Company
James J. Reid, P.E.	ARCADIS-Geraghty & Miller, Inc.
William Somerlot	New Albany High School
Carolyn Watkins	Ohio EPA

FINANCE

Chairperson, Angelo J. Frole, B.S., *University of Dayton*, M.A., *Central Michigan University*

Coordinator, Professor D.J. Carmell, B.S., *The Ohio State University*, B.S., *Franklin University*, M.B.A., *Xavier University*

Faculty, Instructor Jack Popovich, B.S., *The Ohio State University*, M.B.A., *Golden Gate University*

Advisory Committee

Antonio R. Emanuel	Ohio Dominican University
Brian English	EMI
Doug Knisely	Controllershship Services and Financial Planning
Pat O'Brien	National Association of Credit Management
Dr. Bill Rives	The Ohio State University
Erik Thompson	Edward Jones
Joseph A. Trocchio	Merrill Lynch
William VanPelt	Commercial Credit Consultant

FIRE SCIENCE

Chairperson, Daryl Cullison, A.A.S., *Hocking Technical College*, B.S., *University of Cincinnati*, J.D., *Capital University*

Faculty/Coordinator, FF Jay R. Louks, Instructor

Advisory Committee

Capt. Doug Belcher	Columbus Division of Fire
Deputy Chief Richard Braun	Columbus Division of Fire
Lt. Kent Cheek	Madison Township Fire Dept.
Chief L. James DeConnick	Mifflin Township Fire Dept.
Chief Tom DuCharme	Jackson Township Fire Dept.
Lt. Robert Guisinger	Washington Township Fire Dept.
Retired Chief William Henestofel	
FF Brian Miller	Westerville Division of Fire
Retired Chief Gary Termeer	

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Chairperson, Antoinette M. Baldin, B.S., *Purdue University*, M.B.A., *Lewis University*, M.S., *The Ohio State University*

Coordinator, Instructor Michael J. Rock, B.S., *University of California at Davis*, M.A., *University of Colorado at Boulder*

Advisory Committee

David Crecelius	Ohio Department of Natural Resources
Mark Dann	ESRI, Inc.
Stuart Davis	Ohio Department of Administrative Services
Shoreh Elhami	Delaware County Auditor's Office
Carolyn Merry	The Ohio State University
Evan Preston	Battelle Memorial Institute
Derek Mair	EMHT
Todd Jackson	City of Westerville

HEATING, VENTILATING AND AIR CONDITIONING TECHNOLOGY

Chairperson, Dr. Andrew A. Rezin, B.A., *Kent State University*, M.A., *The Ohio State University*, Ph.D., *The Ohio State University*

Coordinator/Faculty Instructor Thomas Henry, B.A., *Franklin University*

Advisory Committee

Margaret Drake	ASHRAE
Henry Fudge	The Liebert Corp.
Bud Healy	NHRAW
Steve Hollern	Quality Air Heating & Air Conditioning
Hal Mullins	HL Heating
Ron Odom	Wenger Temperature
Todd Talbott	United McGill
Peter Walsh	Columbus Temperature Control
Tom Yost	Mason's Supply Company

HEALTH INFORMATION MANAGEMENT TECHNOLOGY

Chairperson, Connie Grossman, R.D.H., *The Ohio State University*, B.S., *The Ohio State University*, M.Ed., *Ohio University*

Coordinator, Associate Professor Lisa A. Cerrato, R.H.I.A., B.S., *The Ohio State University*, M.S., *The Ohio State University*

Associate Professor, Jane Roberts, R.H.I.A., B.S., *The Ohio State University*, M.S., *The Ohio State University*

Advisory Committee

Jane Branham	CMHC Systems
Melanie Brodnik	The Ohio State University
Jill Choi	Children's Hospital
Elizabeth Curtis	The Ohio State University Hospitals
Jean Graff	Bureau of Worker's Compensation
Dana Harms	Madison County Hospital
Russ Hessler	OSU Student Health
Carolyn Miller	Grant/Riverside Hospitals
Charlene Nutter	The Quality Management Consulting Group, Ltd.
Susan Quincil	Mt. Carmel Medical Center
Roberta Schmidt	OSU Veterinary Hospital
Diane Setty	Grant/Riverside Hospitals
Patti Swire	MedQuist
Dee Synder	Care Works of Ohio, Ltd.
Sandra Taylor	Columbus Health Department

HOSPITALITY MANAGEMENT

Chairperson, Margaret Steiskal, RD, CCE, FMP, B.A., *Michigan State University*, M.B.A., *University of Dayton*, Ph.D., *Ohio University*

Faculty, Assistant Professor Deane Cobler, A.A., *Columbus State Community College*, B.S., *The Ohio State University*, M.Ed., *Ohio University*; Assistant Professor Amy Hart, CTC, B.S., *Franklin University*, M.B.A., *Ashland University*; Associate Professor James Taylor, CEC, AAC, A.A.S., *Columbus State Community College*, B.S.B.A., *Franklin University*, M.B.A., *Ashland University*; Instructor Jan Van Horn, RD., LD, B.S., M.S., *The Ohio State University*

Hospitality/Tourism Advisory Committee

Dolores Bennisson Ohio Restaurant Association
 Richard Carlson Hospitality Accounting Services
 Jodi DeGroff Experience Columbus
 Amir Eylon Ohio Hotel & Lodging Association
 Sherry Fish Greater Columbus Convention Center
 R. Thomas George, Ph.D. The Ohio State University
 Alan Howe Hilton Columbus
 Wendy Middleton Cameron Mitchell Restaurants
 Kathleen Evans North Bob Evans Farms, Inc.
 Ike Reynolds Reynolds Travel
 Michael Reynolds Thrifty Car Rental
 Jonathan Turner Abbott Sysco

Dietetic Programs Advisory Committee

Sheila Anderson, M.S., RD, LD WIC Program
 Tracy A. Aitken, DTR, The Laurels of Norworth
 Deborah Goetz, MS, RD, LD Mount Carmel Hospital West
 Richard Harris, CDM LifeCare Alliance
 Pat McGinty, RD, LD The Ohio State University Hospital
 Janice Ritter, RD, LD Borden Center for Nutrition and Wellness
 Anne M. Smith, Ph.D, RD The Ohio State University
 Steven Ward The Ohio State University Hospital
 Janice Yates, DTR Children's Hospital

Chef Apprenticeship Committee

Joe Boggioni, CEC Shawnee Country Club-Lima
 Roland Fellows Friendship Village of Columbus
 Brian Hinshaw Cameron Mitchell Restaurants
 Adam Martter The Blackwell Inn
 Linda Meoak, CEC The Forum at Knightsbridge
 Sharon Pallas, CEPCC Premier Pastries
 Cortney Porter, CC Shane's Gourmet Market
 David Wolf, CEC Hyatt on Capitol Square

HUMAN RESOURCES MANAGEMENT TECHNOLOGY

Chairperson, Angelo J. Frole, B.S., *University of Dayton*, M.A., *Central Michigan University*

Faculty, Associate Professor Amy Brubaker, B.S., *Franklin University*, M.L.H.R., *The Ohio State University*; Assistant Professor Carmen Daniels, B.S., *Ohio University*, M.B.A., *Cleveland State University*

Advisory Committee

Michelle Arnold, A.A.S. Columbus State Community College
 Amy Banta, Ph.D. Defense Logistics
 Jason Barnett Ohio Department of Commerce
 Michelle Barregarye, M.L.H.R., S.P.H.R. HR Experts
 Joe Frash, B.M.E., M.A. Central Ohio ABC
 James Kasubinski, B.S. DLZ Corporation
 Valerie Pike Ohio Department of Administrative Services
 Colleen Rains, B.S., P.H.R. Elford Construction, Inc.
 Timothy Stanton, M.B.A., S.P.H.R. Battelle Memorial Institute
 Mark Steele, M.L.H.R., S.P.H.R. Marco Business Consulting
 G. Scott Warrick, J. D., S.P.H.R. Allied Employer Resources, Inc.
 Mark Weilbacher The Training and Learning Consortium

HUMANITIES DEPARTMENT

Chairperson, Douglas Montanaro, B.A., *Muskingum College*, M.A., Ph.D., *The Ohio State University*

Faculty, Associate Professor Mark S. Bocija, B.A., *University of Akron*, M.A., *University of Akron*; Associate Professor William A. Cook, B.G.S., *Ohio University*, M.A., *Hunter College*, Ph.D., *Ohio University*; Assistant Professor Judith Blackmore Dann, B.A., *Miami University (of Ohio)*, M.A., Ph.D., *The Ohio State University*; Assistant Professor Tim Davis, B.S. *St. John Fisher College*, M.Div., M.A., *St. Bernard's Institute*, Ph.D., *The Union Institute and University*; Assistant Professor Sandy Drakatos, B.A., *Baldwin-Wallace College*, M.A., *Kent State University*, Ph.D., *The Aristotelian University of Thessaloniki*; Assistant Professor David A. Fisher, B.A., *Ohio Dominican College*, STB., STL., *Pontifical Gregorian University*; Instructor Paul Graves, B.A. *Kent State University*, M.A. *Cleveland State University*; Associate Professor Alesa Mansfield, B.A., *College of Wooster*, M.A., *Ohio University*; Assistant Professor Keith Pepperell, LL.B., *Leeds University*, M.Phil., *Sussex University*, MA., *University of Western Ontario*, MA., Ph.D., *The Ohio State University*; Associate Professor Dona Reaser, B.A., M.A., *San Jose*

State, Ph.D., *The Ohio State University*; Professor Denise Riley, B.A., *St. Francis College*, M.A., *Marquette University*, Ph.D., *The Ohio State University*; Associate Professor Patrice C. Ross, B.M.E., *Wittenberg University*, Mus.M., *University of Cincinnati*, Ph.D., *Ohio University*; Professor John Scoville, B.A., *Sherwood Music School*, M.F.A., *School of the Art Institute of Chicago*; Associate Professor Edgar A. Velez, B.A., *St. Alphonsus College*, M.Div., M.R.E., *Mount St. Alphonsus Seminary*, Licentiate in Moral Theology, *Academia Alfonsiana*, M.A., Ph.D., *The Ohio State University*

INTERACTIVE MEDIA

Chairperson, Mary A. Vaughn, A.B., *St. Peter's College*, M.A., *The Ohio State University*

Coordinator, Assistant Professor Jon Lundquist, B.F.A., *The Ohio State University*

Faculty, Associate Professor Patrick Fellers, B.S., *The Ohio State University*, M.Ed., *Ohio University*; Instructor James Higgins, B.S. *Central Missouri State University*, M.A. *Central Missouri State University*

Advisory Committee

Andrew Bornand Reflexdt
 Mark Frye Frye/Schwab Music
 John Geiger Tracer Media
 Shawn Holmes WCMH
 Ruth Holt Events Video Production
 Bret Icenhower Lyon Video Inc.
 Robert Jump Blue Cosmos
 Diane Lyon Horizon Companies
 Mark Snider Mills/James Production

INTERPRETING/ASL EDUCATION

Chairperson, Lenore Schneiderman, A.A.S., *American River Junior College*, B.A., M.S.W., LISW, *The Ohio State University*

Coordinator, Associate Professor, Christine A. Evenson, A.A.S., *Columbus State Community College*, B.S., M.A., *The Ohio State University*

Faculty, Professor Alan Atwood, B.S., *University of Tennessee*, M.A., *California State University at Northridge*, R.I.D.: CSC. ASLTA: ASL Professional, NLTP, Associate Professor Tina Perry, A.A.S., *Columbus State Community College*, B.S., *Wilberforce University*, M. Ed., *Ohio University*, R.I.D.CI/CT, NAD: Level V

Advisory Committee

Jeffrey Bohrman Ohio Deaf Blind Outreach Program
 Wayne Cocchi Disability Services, Columbus State Community College
 Stephanie Criner Sorenson VRS
 Linda Ford Smith Columbus Colony Elderly Care
 Marianne Hesselntine Franklin County Education
 Richard Huebner Ohio School for the Deaf Alumni Association
 Claudia Kinder OSU Dept of Disability Services
 Anna Nauman CRIS Interpreting Services
 Sara Paullin-Casto Ohio School for the Deaf
 Linda Ross Hallenross Interpreting
 Vince Sabino Southeast, Inc.
 Lori Zucal Deaf Services Center

LANDSCAPE DESIGN/BUILD

Chairperson, Antoinette M. Baldin, B.S., *Purdue University*, M.B.A., *Lewis University*, M.S., *The Ohio State University*

Coordinators, Professor Steven C. O'Neal, M.S., *The Ohio State University*; Professor Richard K. Ansley, ASLA, B.S., B.S.L.A., *The Ohio State University*

Landscape Design/Build Advisory Committee

Jason Douglas Student
 Debra Knapke Adjunct Faculty
 Steve Pattie The Pattie Group
 David Peabody Peabody Landscape
 Ann Joyce The Brickman Group, LTD.
 Mark Schieber Schieber & Associates
 Dr. Elton Smith Smiths Gardens

LAW ENFORCEMENT

Chairperson, Daryl Cullison, A.A.S., *Hocking Technical College*, B.S., *University of Cincinnati*, J.D., *Capital University*

Faculty, Professor Lawrence Stephens, B.S., *The Ohio State University*, J.D., *Capital University*; Associate Professor Dave Stewart, B.S., *Park College*, M.S., *Central Michigan University*; Associate Professor Scott Wagner, B.A., *The Ohio State University*;

Advisory Committee

Eric Brill White Hall Police Department
 Chief Mark Chaney New Albany P.D.

Chief Dennis Deskins Grove City Police Department
 Sheriff James Karnes Sheriff of Franklin County
 Ron Mihaless Ohio State University P. D.
 Colonel Kenneth Morckel Superintendent, Ohio State Highway Patrol
 Suzanne Muraco Hilliard Police Department
 Sheriff Rocky Nelson Union County S.O.
 Ron O'Brien Franklin Co. Prosecutor's Office
 Brian Sheline Columbus Police Department
 Chief Dave Suci Reynoldsburg Police Department
 Chief Robert Taylor Genoa Township P.D.
 Harry Trombitas Special Agent, FBI

MARKETING

Chairperson, Mary A. Vaughn, A.B., *St. Peter's College, M.A., The Ohio State University*
Coordinator, Professor Phyllis W. Hardy, B.S., *University of Tennessee, M.S.A., Central Michigan University*
Faculty, Instructor Paul Carringer, ASBM, *Columbus Technical Institute, BSBA, Franklin University, MBA, Ohio University*
Advisory Committee
 Darris Blackford Blackford Public Relations
 Loren Geistfeld, Ph.D. Ohio State University
 Michael Hayes Fitch
 James Hendricksont Sterling Commerce
 Natalie Kompa Adjunct Faculty
 Joan Manter Manter Consulting
 Diane Masterson State Auto
 Jack McGinty Higbee's (Retired)
 Rory McGuinness Columbus Crew
 Tom Rausch Interactive Ink

MASSAGE THERAPY

Chairperson, Margaret Steiskal, RD, CCE, FMP, B.A., *Michigan State University, M.B.A., University of Dayton, Ph.D., Ohio University.*
Coordinator, Assistant Professor Antoinette Perkins, B.S. *University of Florida, M.A., Ball State University*
Faculty, Assistant Professor Richard Greely, L.M.T., B.A., M.E.D., *The Ohio State University*
Advisory Committee
 Teresa Bohrer, L.M.T. Licensed Massage Therapist/Alumni Representative
 Barry Barlet, L.M.T. Licensed Massage Therapist/Health Outlook Worldwide
 Ann M Cotter, L.M.T, B.A. Licensed Massage Therapist/Private Practice
 Leslie Kuebler, L.M.T. Licensed Massage Therapist/YMCA of Central Ohio
 Jamie French, A.T.C., L.M.T Licensed Massage Therapist/
 Head Athletic Trainer Ohio Dominican University
 Teresa Bohrer, L.M.T. Licensed Massage Therapist/Alumni Representative
 Dave Litt, A.T.C., Ph.D. Columbus State Community Associate Professor
 Lisa K. Lowery, M.D Orthopedic Surgeon/Private Practice
 Gregory Manning D.C Family Chiropractor and Certified Chiropractic Sports
 Physician/Private Practice
 Martha Ryan , L.M.T. Deep Relaxation Medical Massage Therapy/
 Private Practice
 Earle W. Timberlake, LMT, B.S.C Licensed Massage Therapist/
 Private Practice

MATHEMATICS DEPARTMENT

Chairperson, Jonathan R. Baker, B.S., *Northwestern University, M.S., The Ohio State University*
Faculty, Professor Elizabeth A. Betzel, B.S., *Bob Jones University, M.A., Cleveland State University*; Associate Professor Timothy R. Boyer, B.S., M.S., *Ohio University*; Assistant Professor Sherry Crawford-Eyen, B.A., *Muskingum College, M.S., Ohio University*; Assistant Professor Thomas J. Duda, B.S., M.A., *University of Toledo, M.S., The Ohio State University*; Associate Professor William D. Ferguson, B.A., *Muskingum College, M.Ed., University of Pittsburgh*; Professor Gregory S. Goodhart, B.S., *University of Dayton, M.A., The Ohio State University*; Gary Gutman, B.S. *University of Chicago, Ph.D., Northwestern University*; Instructor Arthur L. Hayes, B.S., *Alcorn State University, M.S., Tennessee State University*; Associate Professor Kevin W. James, B.S., M.Ed., *The Ohio State University*; Assistant Professor Vicki L. Lackey, B.A., M.S., *Wright State University*; Professor Melissa J. Luebben, B.S., M.A., *The Ohio State University*; Associate Professor Philip MacLean, B.S., M.Ed., *The Ohio State University*; Professor Darrell P. Minor, B.S., M.S., *The Ohio State University*; Professor Gerald Mueller, B.A., M.S., M.A., *Cleveland State University*; Assistant Professor John S. Nedel, B.S., *Mount Union College, M.A., Indiana University*; Instructor Nikki Pearce, B.S., M.Ed., *The Ohio State University*; Assistant Professor Kristin Ramsey, B.A., M.A., *University*

of North Carolina at Wilmington; Assistant Professor Gary D. Rensi, B.S., M.S., *Bowling Green State University*; Instructor Kristina Schmid, B.S., *MacMurray College, M.Ed., The Ohio State University*; Associate Professor Kenneth Seidel, B.A., *Colby College, M.A., The Ohio State University*; Instructor Julia A. Shew, B.S., *Southern Nazarene University, M.A., Dartmouth College, Ph.D., University of Wisconsin*; Professor Leslie A. Smith, B.S., *Muskingum College, M.A., The Ohio State University*; Associate Professor Katherine Struve, B.S., *North Carolina State University, M.Ed., Duke University*; Associate Professor Tzu-Yi Alan Yang, B.S., *National Taiwan University, M.S., Ohio University, Ph.D., The Ohio State University*; Assistant Professor Mingzhi Xu, B.S., M.S. *Beijing University, Ph.D., The Ohio State University*;

MECHANICAL ENGINEERING TECHNOLOGY

Chairperson, Dick Bickerstaff, B.A., *Youngstown State University, M.A., The Ohio State University*
Faculty, Associate Professor Shane Bendele, A.A.S., *Lima Technical College, B.A., Ohio Northern, M.A., The Ohio State University*; Professor Jeff Woodson, B.S., *Kent State University, M.S., The Ohio State University*; Assistant Professor Adele Wright, B.S., *Carnegie Mellon University, Ph.D., Georgia Institute of Technology*
Advisory Committee
 Mark Dibling Ross Labs
 William Hughes Timken Company
 Jerry Lepley ATS
 Steve Mowrer Liebert Corp.
 Charles Pitzen Sensotec Inc.

MEDICAL ASSISTING TECHNOLOGY

Chairperson, Connie Grossman, R.DH., B.S., *The Ohio State University, MEd., Ohio University*
Coordinator, Instructor Kay Biggs, C.M.A., A.A.S., *Columbus State Community College, B.S., Franklin University*
Advisory Committee
 Diane Gates, CMA Office of Gary Rupp, MD
 Peggy Mayo, M.Ed, MLT (ASCP) Coordinator, Multi-Competency, CSCC
 Barbara Meyer, BSN, R.N. Counseling and Advising Services, CSCC
 Polly Owen, R.N., Ph.D Chairperson, Nursing, CSCC
 Cheryl Pasternak, CMA Office of Frank Isabelle, MD
 Carol Rouse, CMA Office of Uma Ananth, MD
 Amanda Smith, CMA Excel ENT
 Lisa Ward, PA.C (Medical Advisor) Generations Family Medicine
 Lynette Veach, MLT (ASCP) Consultant
 Carrie Zimpher, CMA, BS Abbott Pharmaceuticals
 Beth Laurenz, R.N., CMA Adjunct Faculty
 Mary Dow, CMA Adjunct Faculty

MEDICAL LABORATORY TECHNOLOGY

Chairperson, Connie Grossman, R.D.H.S., B.S., M.Ed., *Ohio University*
Coordinator, Sandra Arrighi, M.Ed., M.T., *Jones International University*
Advisory Committee
 Debra Bates Marion Technical College
 Patricia Bennon Mt. Carmel Medical Center
 Phyllis Bouic Memorial Hospital
 Ed Firgau Children's Hospital
 Sally Forrest Corrections Medical Center
 Dr. Rose Goodwin (Medical Advisor) Diagnostic Pathology Assoc.
 Margaret Goshay Doctor's West Hospital
 Rhonda Graham Marion General Medical Center
 Jo Henman Madison County Hospital
 Cheryl Kelly OSU Hospitals
 Joanne Kosanke American Red Cross
 Denise Lyle Laboratory Corporation of America
 Bobbie Markely MedCentral Medical Center
 Jan Merryman Grant/Riverside Hospitals

MENTAL HEALTH/CHEMICAL DEPENDENCY/MENTAL RETARDATION

Chairperson, Lenore Schneiderman, A.A.S., *American River Junior College, B.A., M.S.W, L.I.S.W., The Ohio State University*
Faculty, Dianne G. Fidelibus, B.A. *Ohio Dominican College, M.S., University of Dayton*; Marilyn S. Pramschuer, B.F.A., *Ohio University, M.S., The Ohio State University*; Jackie Teny-Miller, A.A.S., *Columbus Technical Institute, B.S., Capital University, M.A., University of Dayton*
Clinical Coordinator,
Advisory Committee
 Janie Bailey Columbus Area Community Mental Health Center

Paul Coleman..... Maryhaven, Inc.
 Steve Drewry Department of Social Work, Capital University
 Tom Fish The Nisonger Center
 Carolyn Givens Ohio Department of Alcohol and Drug Addiction Services
 Marc Grodner..... Fairfield County Drug and Alcohol Recovery Center
 Debora Nixon-Hughes Correctional Reception Center
 Jed Morrison Franklin County Board Mental Retardation/Developmental Disabilities
 Virginia O'Keefe..... Amethyst, Inc.
 Barbara Poppe..... Community Shelter Board
 Bob Short Twin Valley Psychiatric System
 Sandy Stephenson..... Southeast, Inc.
 David Royer,..... Franklin County Board of Alcohol, Drug Addiction and Mental Health Services
 Mary Vail..... Goodwill Columbus
 Steve Wilson Steve Wilson and Company
 Donald Wood North Central Mental Health Services

MODERN LANGUAGE DEPARTMENT

Chairperson, Garry Fourman, B.A., *Philipps University, Germany, M.A., The Ohio State University, Ph.D., University of Cincinnati*
Faculty, Assistant Professor Linda Berton, B.S., *College of Charleston, M.A. The Ohio State University*; Professor Daniel C. Chaney, B.S., *Clarion State College, M.A., University of Pittsburgh*; Assistant Professor Terry Eisele, B.A. *Miami University, M.A., The Ohio State University*; Professor Luis E. Latoja, B.A., *University of Chile, M.A., Lancaster University, M.A., Ohio University*; Professor Julie A. Molnar, B.A., M.A., *Miami University, Ph.D., The Ohio State University*; Associate Professor Gilberto Serrano, M.A., *The Ohio State University, M.A., The University of Arkansas, B.A., University of Puerto Rico*; Associate Professor Catherine A. Treyns, B.S., *The Ohio State University, M.A., The Ohio State University*; Professor Donna L. Weyrich, B.A., *Loyola College, M.A., The University of Maryland, Baltimore*

MULTI-COMPETENCY HEALTH

Chairperson, Connie Grossman, R.D.H.S., B.S., M.Ed., *Ohio University*
Coordinator, Instructor Peggy Mayo, M.Ed. *Ohio University MLT (ASCP)*
Histology Advisory Committee
 Anna Cherry, HT (ASCP) OSU Hospitals
 Mary Jo Cistone, HT (ASCP) Battelle Memorial Institute
 Jackie Grewe HT(ASCP)..... Riverside/Grant Hospitals
 Connie Essman-Wood, HT (ASCP) Battelle Memorial Institute
 Shaun Smith HT(ASCP)..... Department of Agriculture
 Scott Fox HT(ASCP)..... Department of Agriculture
 David Ramey, Lab Director Adena Medical Center
 Julie Moore, HT(ASCP) Children's Hospital
 Joelyn Weaver, HTL(ASCP)..... Children's Hospital
 Sheila Turner, HT (ASCP)..... Adena Health System

Phlebotomy Advisory Committee

Judi Bussey-Adams Doctors Hospital
 Karen Byrnes Mt. Carmel Medical Center
 Denora Carlisle Quest Diagnostics
 Gerald Collins Fort Hayes Career Center
 Margee Dalton Doctor's Hospital
 JoLynn Franz..... Mount Carmel East
 Jan Lesko Columbus State Community College
 David Ramey Adena Medical Center
 Patti Ratliff..... Doctors Hospital
 Jennifer Reed St. Ann's Hospital
 Karen Robinson Mount Carmel East
 Tim Warburton Riverside Methodist Hospital

NUCLEAR MEDICINE TECHNOLOGY

Chairperson, Terrence A. Brown, N.H.A., M.H.S.A., Ph.D., *Ohio University*
Coordinator, Assistant Professor Mary Morgan, B.S. and M.S *Indiana University, C.N.M.T.*
Advisory Committee
 John E. Baumert, M.D. Riverside Methodist Hospital
 James Byrne, M Ed., RT(R)..... Columbus State Radiography
 Shelly M. Catanzaro, C.N.M.T. Sanofi-Aventis
 Karen Martin, A.S., C.N.M.T., RT(N) Riverside Methodist Hospital
 Chris Mitchell, C.N.M.T., RT(R)..... Miami Valey Hospital
 Ken Montgomery, M.S., C.N.M.T., RT(R)..... Grant Medical Center
 Kathleen P. Pfahl, C.N.M.T., RT(R) Bristol-Myers Squibb
 Jerry G. Tyree, M.S., RT(R)..... Columbus State Radiography
 Michele Zahel, B.S.R.T., C.N.M.T. Riverside Methodist Hospital

NURSING

Chairperson, Jan Wagner, Ph.D., *The Ohio State University, M.S.N., B.S.N., Hunter College*
Faculty, Instructor Susan Accetturo, R.N., B.S.N., *Capital University, M.S.N., University of Phoenix*; Instructor Tina Berry, R.N.C.P.H.Q., B.S.N., *The Ohio State University, M.S.N./M.B.A., University of Phoenix*; Assistant Professor Joy Bonnavier, R.N., B.S.N. *Western Connecticut State University, M.S.N., Boston College*; Professor Lorraine Boyd, R.N., B.S.N., M.S.N., *The University of Cincinnati*; Associate Professor Dana Buechner, R.N., B.S.N., M.S., N.N.P., *The Ohio State University*; Instructor Scott Dolan, B.S.N., *Kent State University*; Instructor Constance Doughty, R.N., B.S.N., M.S., *The Ohio State University*; Instructor Karen Hughes, C.M-S.R.N., B.S.N., *The Ohio State University*; Instructor, Shirley Keckley R.N.C, B.S.N., *The Ohio State University*; Assistant Professor April Magoteaux, R.N., B.S.N., M.S.N., *The University of Cincinnati*, Professor Anna Mascio, R.N., B.S.N., *St. John College, M.S., The Ohio State University*; Professor Jackie Miller, R.N.C, B.S.N., M.S., *The Ohio State University*; Associate Professor Tammy Montgomery, R.N., B.S.N., *Otterbein College, M.S., Wright State University*; Associate Professor Jacqueline Walli, R.N., B.S.N., *Ohio University, M.S., The Ohio State University*; Professor Amy Weber, R.N., B.S.N., *Wichita State University, M.S., University of Oklahoma*; Assistant Professor Jane Winters, R.N., B.S.N., *Capital University, M.S., The Ohio State University*

Advisory Committee

Sherry Bockus, R.N., M.S..... Columbus State Community College L.P.N. Program
 Nancy Calvary, R.N., B.S.N Home Reach Home Care
 Marci Conti, R.N., M.B.A Doctor's Hospital
 Cheryl Boyd, Ph.D., R.N The Ohio State University Hospitals
 Beverly Orazen Mt. Carmel Medical Center
 Rita Krummen, R.N., B.S.N., M.S.N., Coordinator, Nursing Certificate Programs with Columbus State
 Ann Schiele, R.N., Ph.D Mt. Carmel School of Nursing
 Linda Stoverock, R.N., M.S.N Children's Hospital
 Linda Wagner, R.N., M.A., C.N.A.A Riverside Methodist Hospital

NURC/Patient Care Skills Advisory Committee

Judy Bender R.N Westminster Thurber Community
 Susan Capan B.S.N., R.N Mother Angeline McCrory Manor
 Cheryl Chrysler R.N First Community Village
 Jan Dew B.S.N., R.N Wesley Glen Health Center
 Gail Maier Ph.D., R.N The Ohio State University
 Beverly Orazen Mt. Carmel Medical Center
 Regina Stefanik R.N., C., M.Ed., M.S Children's Hospital
 Linda Wagner R.N., M.A., C.N.A Riverside/Grant Hospital

OFF-CAMPUS PROGRAMS

Administrator, Susan M. Norris-Berry, B.A., *Norwich University, M.A., University of Vermont*
Coordinator, Business Management at Madison Correctional Institution, Assistant Professor Gil Feiertag, B.C., *Bliss College, M.S.A., Central Michigan University*
Coordinator, Workplace Skills at Ohio Reformatory for Women, Professor Larry Edwards, B.A., *Otterbein College, M.A., The Ohio State University*
Coordinator, Dental Laboratory Technology at London Correctional Institution, J. Robert Duffey, A.A.S., *Columbus State Community College*

OFFICE ADMINISTRATION

Chairperson, Angelo J. Frole, B.S., *University of Dayton, M.A., Central Michigan University*
Coordinator, Professor Elizabeth Miller, B.A., *Fairmont State University, M.A., The Ohio State University*
Faculty, Professor Betty Allen, B.A., *Cedarville University, M.A. The Ohio State University*; Assistant Professor Beth McGrath, M.Ed., *Ohio University, B.S., Western Kentucky University*
Advisory Committee
 Thomas Albaugh OADM Adjunct Instructor
 Wendy B. Bonham Lane, Alton & Horst, Attorneys at Law
 Mary Bray OCLC
 Nancy Colegrove Limited Brands, Inc.
 Sheila A. Cowley The Ohio State University
 Hazel Henthorne Limited Brands, Inc.
 Kathleen Jacomet John N. Alton Co., LPA
 Claire Lacey, CPS Graduate of Office Administration Technology
 Elsa Pagliery, CPS Highlights for Children, Inc.
 Diane Smith Grant Riverside Hospitals

Jeffrey Spain Business & Industry Department, CSCC
Kimberlee Wilcox Ohio Department of Administrative Services
Rosalynne Taylor Woods Int'l Assn of Admin Professionals, President

PARALEGAL STUDIES

Chairperson, Daryl Cullison, A.A.S., *Hocking Technical College, B.S., University of Cincinnati, J.D., Capital University*

Faculty, Assistant Professor Thomas G. Shanahan, B.S., *The Ohio State University, J.D., Capital University*; Assistant Professor Hakim B. Adjoua, A.B., *University of Michigan, J.D., University of Michigan*, Professor Lawrence Stephens, B.S. *The Ohio State University, J.D. Capital University*

Advisory Committee

John Annarino Attorney at Law
Lavawn Coleman Grange Mutual Insurance
Timothy Crawford Nationwide Financial Services
Pam McCoy Domestic Violence Unit Columbus City Attorney
Richard Mellen Double Eagle Club
Patsy Thomas Prosecutors Division Columbus City Attorney
Natalie Walden Nationwide Life Insurance
Victoria L. Wythe Cloppert, Portman, Sauter, Latanick & Foley
John Shawkey Grange Insurance
Grey Jones, Esq. Price and Jones Law Office
Judge James Green Franklin County Municipal Court
Amanda Coleman Jones Day
April Martin Office of Attorney Michael Oser

PRACTICAL NURSING CERTIFICATE PROGRAM

Chairperson, Jan Wagner, Ph.D., *The Ohio State University; MSN, BSN Hunter College*

Faculty/Coordinator, Assistant Professor Sherry Bockus, M.S., RN *The Ohio State University*

Advisory Committee

Judy Bender, RN Westminster
Cheryl Chrysler, RN, BSN First Community Village
Becky Katz, RN, MA, CCRN Mount Carmel
Judy Lares, LPN Lutheran Village
Regina Stefanik, RN, BC, BSN, MS, ME Childrens Hospital
Linda Wagner, RN, MA, CNA OhioHealth

QUALITY ASSURANCE TECHNOLOGY

Chairperson, Dick Bickerstaff, B.A., *Youngstown State University, M.A., The Ohio State University*

Faculty, See Mechanical Engineering Technology

Advisory Committee

See Mechanical Engineering Technology

RADIOGRAPHY

Chairperson, Terrence A. Brown, N.H.A., M.H.S.A., Ph.D., *Ohio University*

Coordinator, Associate Professor James Byrne, R.T., M.Ed., *The Ohio State University*

Faculty, Assistant Professor Jerry Tyree, R.T., M.S., *The Ohio State University*

Advisory Committee

Bryan Applequist, R.T. Riverside Methodist Hospital
Cayte Coakley, R.T. Department of Veterans Affairs
Mark Ferguson, R.T. Doctors Hospital
Michi Fletcher, R.T. Grant Medical Center
Jamie Hencye, R.T. Berger Health System
Christy Heppner, R.T. Memorial Hospital of Union County
Troy Reed, R.T. Doctors Hospital
Katie Schreiber, R.T. Madison County Hospital

REAL ESTATE

Chairperson, Dr. Andrew A. Rezin, B.A., *Kent State University, M.A., The Ohio State University, Ph.D., The Ohio State University*

Coordinator, Assistant Professor Tom Barrowman, B.A. *Franklin University*

Advisory Committee

Joseph Budde Columbus State Community College
Marge Drake Cam Taylor Realty
Jim Lubinsky RE/MAX Affiliates
Donna Stevenson Northwest Title
Skip Weiler The Robert Weiler Company, Realtors
Cindy Windsor Key Bank

RESPIRATORY CARE ADVISORY COMMITTEE

Chairperson, Connie Grossman, R.D.H., B.S., *The Ohio State University, M.Ed., Ohio University*

Program Coordinator, Associate Professor Susan L. Donohue, R.R.T., B.S., *Franklin University, M.Ed., Ohio University*

Clinical Coordinator, Instructor Mary Ann Canter, R.R.T., B.S.A.S., *Youngstown State University, M.H.S.A., Ohio University*

Advisory Committee

Thomas J. Boes, M.D. Medical Director
Marion Breidenbach, R.R.T. Ohio Health
Laura Evans, R.R.T., Columbus Children's Hospital
Lora Hamparian, R.R.T., University Hospital East
Joanne Perez-Trees, R.R.T., Grant Medical Center
Jim Snider, R.R.T., Committee Chairperson Mount Carmel Medical Center
Chuck Storch, R.R.T., Mount Carmel East Hospital
Debbie Tripp, R.R.T. St. Ann's Hospital

SOCIAL AND BEHAVIORAL SCIENCES DEPARTMENT

Chairperson, Karen L Muir, B.A., M.A., Ph.D., *The Ohio State University*

Faculty, Assistant Professor Lilia M. Bermudez, B.A., *University of Puerto Rico at Mayaguez, M.A., Inter American University of Puerto Rico, Ph.D., The Ohio State University*; Assistant Professor Glenn H. Clayman, B.A., *Ohio University, M.A., Miami University*; Professor Robert J. Fitrakis, B.S., *Grand Valley State Colleges, M.A., Ph.D., Wayne State University, J.D., The Ohio State University*; Professor Judith D. Gentry, B.S., *University of Pittsburgh, M.A., Adelphi University, Ph.D., The Ohio State University*; Assistant Professor Traci Haynes, B.A., M.A., *Ohio University*; Associate Professor Marilyn K. Howard, A.A.S., *Columbus State Community College, B.A., Ohio Dominican College, M.A., Ph.D., The Ohio State University*; Professor Scott Hunt, B.S., *John Carroll University, M.A., Ph.D., The Ohio State University*; Instructor Heather Johnston, B.A., *University of Florida, M.A., Ph.D., The Ohio State University*; Assistant Professor Carolyn M. Kaufman, B.A., *Otterbein College, Psy.D., Wright State University*; Assistant Professor Tracy L. Little, B.S., *University of Tennessee at Chattanooga, M.A., Ph.D., The Ohio State University*; Associate Professor Karsten K. Look, B.S., *Knox College, M.S., Emporia State University*; Instructor Rebecca Mobley, B.A., *Beloit College, M.A., Indiana University*; Assistant Professor Adam N. Moskowitz, B.A., M.A., Ph.D., *The Ohio State University*; Assistant Professor Eric C. Neubauer, B.S., *West Liberty State College, M.A., Ph.D., The Ohio State University*; Assistant Professor Mary Lia Reiter, B.B.A., *Texas A & M University, J.D., M.A., The Ohio State University*; Assistant Professor Susan Rogers, A.A., *Casper College, B.A., University of Wyoming, M.Ed., Southwest Texas State University, Ph.D., Indiana University*; Professor Judy Roobian-Mohr, B.B.A., *University of Hawaii, M.A., Central Michigan University, Ph.D., The Ohio State University*; Associate Professor Michael L. Schumacher, B.S., M.A., *Ball State University, M. Div., Trinity Lutheran Seminary*; Instructor Peter Karim Sesay, B.A., M.A., *Ohio University, Ph.D., The Ohio State University*; Associate Professor James A. Stewart, B.A., M.A., *The Ohio State University*; Instructor Erica D. Swarts, B.A., *Miami University, M.A., Ph.D. The Ohio State University*; Assistant Professor David M. Tom, B.A., *Rutgers University, M.A., Ph.D., The Ohio State University*

SPORT AND EXERCISE STUDIES

Chairperson, Margaret Steiskal, RD, CCE, FMP, B.A., *Michigan State University, M.B.A., University of Dayton, Ph.D., Ohio University*

Faculty, Professor Thomas A. Habegger, B.S., *West Virginia University, M.A., The Ohio State University, Ph.D., The Union Institute & University*; Associate Professor David W. Litt, ATC, RN, NSCA-CPT, A.S.N., *Otterbein College, B.S., Muskingum College, M.Ed., Ashland University, Ph.D., Ohio University*. Assistant Professor Eric L. Welch, B.B.A., *Marshall University, M.A., The Ohio State University.*

Advisory Committee

Theodore L. Adams, M.A., J.D. Ohio Attorney General's Office
Mary Bass, ACSM-ES The Ohio State University
Jackie Buell, Ph.D., ATC The Ohio State University
Dale R. Gresson, A.A.S., B.S. SFM Alumni Representative
Donald P. Moxley, M.S. Health First
Kristen G. Myers, M.A. Sport Management Consultant
Rosemary Riley, Ph.D., L.D. Ross Products Division, Abbott Labs
Wendy J. Fraley, A.A.S., AFIC World Gym & Fitness
Ricci G. Washburn, M.S. Home Field Advantage
Paul Weber, B.S. Columbus Metropolitan YMCA North

SUPPLY CHAIN MANAGEMENT

Chairperson, Mary A. Vaughn, A.B., *St. Peter's College, M.A., The Ohio State University*

Faculty, Assistant Professor Lee Blyth, B.S.E.D., *Ohio University, M.S.E.D., Ohio University*; CPBA, *TTI of Scottsdale, AZ*

Advisory Committee

Jami Dewolf Victoria's Secret
Christine Lemon Chelseahouse International
James Primm FedEx Ground
Janet Prior Accurate Logistics LTD
Joe Rinehart DHL Solutions
Bob Robinson Yellow Transportation
Timothy Williams McGraw-Hill
Walter Zinn, Ph.D. The Ohio State University

SURGICAL TECHNOLOGY

Chairperson, Terrence A. Brown, N.H.A., M.H.S.A., Ph.D., *Ohio University*

Coordinator, Instructor Dennis P. Murphy, A.A.S., *Columbus State Community College, B.S., Mount Carmel College*

Advisory Committee

Sue A. Burke, R.N. The James Cancer Hospital
Nancy Parker The James Cancer Hospital
Karen Hoffman, R.N. Riverside Methodist Hospital
Lisa Marti, C.S.T. The James Cancer Hospital
Lynda Petty The Ohio State University Medical Center
Mary Ferraro The Ohio State University Medical Center
Jeremy Daugherty Mt. Carmel East Hospital

TECHNICAL COMMUNICATION

Chairperson, Bruce J. Ardinger, B.A., M.A., *Duquesne University, Ph.D., Kent State University*

Program Coordinator, Professor Susan Moran, B.A., M.A. *Bowling Green State University*

Faculty, Instructor Douglas Gray, B.A., M.A., *University of Mississippi, M.A., University of Virginia, Ph.D., University of Dallas*; Professor Frances Hale, B.A., *Miami University, M.A., The Ohio State University*; Instructor Robert Stein, B.A. *University of Iowa; M.A., University of Missouri – Kansas City.*

Advisory Committee

Mary Fisher Consultant
Tom Hockman Honda of America
Leslie Hughes Battelle Memorial Institute
Bill Houston UUNet
Lee McBride Nationwide
Joanne Murphy OCLC
Pam Roliff Compuware
Lois Yoakam OCLC

Special Consultants

William O. Coggin, Ph.D. Bowling Green State University
Pamela Ecker Cincinnati Technical College
Stuart Selber, Ph.D. Clarkson University

VETERINARY TECHNOLOGY

Chairperson, Terrence A. Brown, N.H.A., M.H.S.A., Ph.D. *The Ohio University*

Program Coordinator, Associate Professor Brenda A. Johnson, D.V.M., *The Ohio State University*

Faculty Assistant Professor Dr. Carla Mayers Bletsch, D.V.M., *The Ohio State University*; Professor Denise Mills, M.S., *The Ohio State University*; Assistant Professor Terence A. Olive, D.V.M., *The Ohio State University*

Advisory Committee

Jack Advent Ohio Veterinary Medical Association
Richard Bednarski, D.V.M. The Ohio State University
RuthAnn Branoff, R.V.T. Community Member
Earl Harrison, R.V.T. Ohio Association of Veterinary Technicians
Linda Heidenreich, R.V.T. Village Veterinary Care
Karen Henry, D.V.M. Animals R Special Veterinary Clinic
Michael Kelleher, D.V.M. Healthy Pets of Rome Hilliard
Linda Lehmkuhl, D.V.M. MedVet Medical Center For Pets
Don R. Mann, D.V.M. Don R. Mann, D.V.M., Inc.
Gwen E. Myers, D.V.M. The Columbus Zoo and Aquarium
Elena Shellenberger, R.V.T. Battelle Memorial Institute
Barbara Whitlock, D.V.M. Capital Area Humane Society

Accreditation/Certification/Approval

Columbus State Community College is accredited by The Higher Learning Commission; Member-North Central Association (NCA), 30 N. LaSalle St., Suite 2400, Chicago, Illinois 60602-2504, (312) 263-0456 or (800) 621-7440. Many of Columbus State's degree programs are accredited by professional associations and agencies as listed below.

Allied Health

Health Information Management Technology

Committee on Allied Health Education Programs (CAAHEP)
35 East Wacker Drive, Suite 1970
Chicago, Illinois 60606-2208
(312) 253-9355

Medical Assisting

Commission on Accreditation of Allied Health Education Programs
35 East Wacker Drive, Suite 1970
Chicago, Illinois 60601
(312) 253-9355

Medical Laboratory Technology

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
8410 West Bryn Mawr Avenue, Suite 670
Chicago, Illinois 60631-3415
(713) 714-8880

Multi-Competency Health (Histotechnology)

Multi-Competency Health (Phlebotomy)

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
8410 West Bryn Mawr Avenue, Suite 670
Chicago, Illinois 60631-3415
(713) 714-8880

Respiratory Care

Committee on Accreditation for Respiratory Care (CoARC)
1710 West Eules Boulevard, Suite 300
Eules, Texas 76040-6823
(817) 283-2835

Automotive Technology

Automotive Technology and Ford ASSET Program

National Institute for Automotive Service Excellence (ASE)
National Automotive Technicians Education Foundation (NATEF)
101 Blue Seal Drive, Suite 101
Leesburg, Virginia 20175
(703) 669-6650

Business

Accounting and Finance

Business Management

Human Resources Management Technology

Office Administration

Association of Collegiate Business Schools and Programs (ACBSP)
7007 College Boulevard, Suite 420
Overland Park, Kansas 66211
(913) 339-9356

Construction Science

Construction Management

American Council of Construction Education (ACCE)
1300 Hudson Lane, Suite 3
Monroe, Louisiana 71201-6054
(318) 323-2816

Landscape Design/Build

Professional Landscape Network (PLANET)
150 Elden Street, Suite 270
Herndon, Virginia 20170
(703) 736-9666

Engineering Technologies

Aviation Maintenance Technology

Federal Aviation Administration
2780 Airport Drive, Suite 300
Columbus, Ohio 43219
(614) 255-3120

Electronic Engineering Technology

Accreditation Board of Engineering and Technology, Inc (ABET)
111 Market Place, Suite 1050
Baltimore, Maryland 21202
(410) 347-7700

Health, Dental and Veterinary Technology

Dental Hygiene

American Dental Association Commission on Dental Accreditation
211 East Chicago Avenue
Chicago, Illinois 60611-2678
(312) 440-2915

Veterinary Technology

American Veterinary Medical Association
Committee on Veterinary Technician Education and Activities
1931 North Meacham Road, Suite 100
Schaumburg, Illinois 60173-4360
(847) 925-8070

Radiography

Joint Review Committee on Accreditation for Radiologic
Technology Programs
20 North Wacker Drive, Suite 900
Chicago, Illinois 60606-2901
(312) 704-5300

Surgical Technology

Commission on Accreditation of Allied Health Education
Programs (CAAHEP)
Accreditation Review Committee on Education in
Surgical Technology (ARC-ST)
7108 C. South Alton Way
Englewood, Colorado 80112-2106
(303) 694-9262

Hospitality Management

Commission on Accreditation of Hospitality
Management Programs (CAHM)
P.O. Box 400
Oxford, MD 21654
(410) 226-5527

Chef Apprenticeship Major

Food Service/Restaurant Management Major

American Culinary Federation Accrediting Commission
10 San Bartola Drive
St. Augustine, Florida 32086
(800) 624-9458

Dietetic Technician Major

Commission for Accreditation and Approval of
Dietetics Education
The American Dietetic Association
216 W. Jackson Boulevard
Chicago, Illinois 60606-6995
(800) 877-1600 ext. 4874

Dietary Manager Certificate

Dietary Managers Association
406 Surrey Woods Drive
St. Charles, Illinois 60174
(800) 323-1908

Massage Therapy

The State Medical Board of Ohio
77 S. High Street, 17th Floor
Columbus, Ohio 43266-0315
(614) 466-3934

Human Services

Mental Health/Chemical Dependency/Mental Retardation
Council for Standards in Human Services
Education (CSHSE)
Margaret J. Barbee
Vice President, Program Approval
1612 Greenville Boulevard S. E.
Greenville, North Carolina 27858
(252) 752-5320

Integrated Media and Technology

Computer Information Technology

Supply Chain Management

Marketing

Retail Management

Association of Collegiate Business Schools and
Programs (ACBSP)
7007 College Boulevard, Suite 420
Overland Park, Kansas 66211
(913) 339-9356

Justice and Safety Programs

Emergency Medical Technician-Paramedic Program

Committee on Accreditation of Allied Health Education
Programs (CAAHEP)
Joint Review Committee on Educational Programs for
EMT/Paramedic
7108-C South Alton Way, Suite 150
Englewood, California 80112-2106
(303) 694-6191

Emergency Medical

Technician-Paramedic Program State of Ohio
EMS Agency
P.O. Box 182073
Columbus, Ohio 43219
(614) 466-9447

Paralegal Studies

American Bar Association
Standing Committee on Legal Assistants
750 North Lake Shore Drive
Chicago, Illinois 60611
(312) 988-5618

Nursing

Nursing

National League for Nursing Accrediting Commission
(NLNAC)
61 Broadway, 33rd Floor
New York, New York 10006
(216) 363-5555 ext. 153

Ohio Board of Nursing
17 S. High Street, Suite 400
Columbus, Ohio 43215-3413
(614) 466-3947

Nurse Aide Training Program (NATP)

Ohio Department of Health NATCEP Unit
246 North High Street
P. O. Box 118
Columbus, Ohio 43216-118
(614) 752-8285

Practical Nursing

Ohio Board of Nursing
17 S. High Street, Suite 400
Columbus, Ohio 43215-3413
(614) 466-3947

Index

A

ACT Center	48
Academic Dismissal	28
Academic Honors	27
Academic Probation	28
Academic Programs	72
Academic Progress	27
Academic Standing	27
Academic Warning	27
Accounting	81, 189
Accreditation	inside front cover & 340
Administration	330
Administrative Assistant Major	156
Administrative Assistant Legal Cognate	156
Administrative Assistant Medical Cognate	156
Admissions (Enrollment Services)	10
Admissions Office (Welcome Center)	7
Admission Policy	10
Advanced Level Chemical Depend. Cert.	145
Advising Services	35
Advisory Committees	331
Airframe Certificate	86
American Sign Language/Deaf Studies Cert.	128
Anthropology	191
Animal Assisted Therapy in Education Certificate	149
Appeals Process	77
Application Procedure	10
Applied Technologies	83, 192
Appraisal	85, 193
Arabic	181
Architecture	86, 194
Army Reserve (ROTC)	15
Art	197
Arts & Sciences/Transfer Programs	72
Associate of Applied Science	73
Associate of Technical Studies Cert. Prog.	72
Athletics	38
Audit	30
Automotive Service Management Major	88
Automotive Technology	88, 198
Aviation Maintenance Technology	92, 201

B

Basic Electrocardiography Certificate	161
Basic Eligibility Requirements (Financial Aid)	16
Biology	205
Board of Trustees	330
Bookkeeping Certificate	82
Bookstore	34
Business and Industry Consulting Services	44
Business Management	88, 207
Business Management Major	93

C

Cafeteria	37
Calculating Grade Point Avg.	27
Calendar	4
Campus Directory	2
Campus Tours	7
Career & Technical Programs	72
Career Services	35
Cashiers Office	34
Catalog Rights	73
Certificate Programs	72
Certificate of Account. Concentration	82
Change of Name/Address/Program of Study/Phone Number	15
Chef Apprentice Major	122
Chemistry	211
Child Development Center	34
Child Care Administration Certificate	98
Civil Engineering Technology	97, 213
Class Attendance	27
College Transcript	10
Columbus State in Brief	7
Columbus State Community College Mission	inside back cover
Commencement	30
Communication Skills	213
Community Education and Workforce Development	44
Community Living Spec. Certificate	157
Computer Electronics Major	116
Computer Information Technology	99, 214
Construction Management	104, 219
Continuing Professional Education	48
Corrections Major	142
Cougar Mail/Cougar Net	34
Counseling Services	36
Course Descriptions	188
Course Drop/Withdrawal Procedure	29
Course Numbering System	188
Cross-Registration at Other Institutions	14

D

Dance	220
Day Care (Child Development Center)	34
Dean's List	27
Degree Audit Report (DARS)	30
Delaware Center	8
Dental Hygiene	106, 221
Dental Laboratory Tech./Small Bus. Mgt. ATS	107, 223
Dental Laboratory Certificate	108
Designing Your Own Degree	79

Desktop Publishing Certificate	110
Developmental Education.....	224
Dietary Manager Certificate.....	134
Dietetic Technician Major.....	132
Digital Design and Graphics.....	109
Digital Photography.....	110
Direct Marketing Certificate.....	145
Direct Marketing Major.....	145
Directories.....	329
Disability Services.....	36
Dismissal.....	28
Distance Learning-Global Campus.....	61
Diversity Initiatives.....	39
Dublin Center.....	8

E

E-Commerce Certificate.....	134
Early Childhood Development.....	112, 229
Economics.....	214
EDP Auditing Major.....	78
Educational Resources Center (Library).....	36
Educational Talent Search.....	41
Electro-Mechanical Engineering Tech.....	114, 233
Electronic Engineering Technology.....	115, 233
Eligibility Requirements.....	16
Emergency Medical Services/Fire Sci.	118
Emergency Medical Services Tech.	117, 235
EMT - Basic Certificate.....	118
EMT - Intermediate Certificate.....	118
EMT - Paramedic Certificate.....	118
English.....	219
English as a Second Language.....	241
Environmental Science, Safety & Health.....	122, 242
Estimating/Bidding Certificate.....	98
Examination/Proficiency Credit.....	26
Exercise Specialist Certificate.....	178
Explanation of Course Description Codes.....	188

F

Facility Management Certificate.....	88
Faculty.....	331
Family Education Rights & Privacy Act.....	31
Fee Payment.....	20
Fees.....	20
Field Supervision Certificate.....	105
Financial Aid.....	15
Finance.....	112, 244
Fire Science.....	125, 244
Food Service.....	37
Food Service/Restaurant Mgmt. Major.....	133
Ford Asset Program.....	90
French.....	246
Fresh Start Rule.....	29

G

Gahanna Center.....	8
General Admission Information.....	10
General Information.....	3

General Residency for Tuition Surcharge Purposes.....	22
Geographic Information Systems.....	125, 246
Geography.....	247
Geology.....	248
German.....	248
Global Campus.....	61
Glossary.....	346
Golf Course.....	38
Good as Gold Program.....	13
Grade Point Average.....	26
Grade Report.....	26
Grades.....	26
Grading and Academic Procedures.....	26
Graduation Honors.....	30
Graduation Requirements.....	30
Graduation Requirements: Associate of Applied Science Degree.....	78
Graduation Requirements: Associate of Arts and Associate of Science Degrees.....	73
Graduation Requirements: Associate of Technical Studies Degree Designing Your Own Degree.....	79
Graduation Requirements: Catalog Rights.....	73
Grievance Procedure.....	32

H

Handbook.....	40
Health & Safety Training for Haz. Waste Oper. Cert.....	122
Health Care Manager Certificate.....	149
Health Information Management Tech.	127, 249
Health Insurance.....	20
Health Record.....	13
Heating, Ventilating & Air-Conditioning Tech.	129, 251
High Pressure Boiler License Trng. Prog.	119
High School Diploma.....	12
High School Transcript.....	10
Histology Certificate.....	147
Histology Degree Track.....	147
Honors Program.....	79
Hospitality Management.....	130, 253
Housing.....	37
Human Resources Management Tech.....	135, 257
Humanities.....	259

I

Identification Number.....	10
Incomplete.....	26
Incorrect Grade Report.....	26
Information and Services (Financial Aid).....	18
Institutional Goals.....	inside front cover
Instructional and General Fees.....	20
International Initiatives.....	40
International Students.....	11
International Students (Fees).....	20
Interactive Media.....	136, 260
Interpreting/ASL Education.....	138, 264
Intramural Sports.....	38
Italian.....	266

J	
Japanese	267

K	
K-12 Initiatives	42

L	
Lab Fees	20
Landscape Design/Build	140, 267
Language Institute	51
Large Commerical Certificate	130
Late Payment of Fees	20
Latin	268
Law Enforcement	141, 269
Law Enforcement Major	141
Law Enforcement Major-Academy Track	141
Law Enforcement Management Major	141
Legal Assisting (See Paralegal)	
Library-(Educational Resources Cent)	36
Literature (see English)	237

M	
Maintenance & Light Repair Certificate	91
Managing Interpersonal Skills Certificate	93
Map	6
Marketing	144, 272
Marysville Center	8
Massage Therapy	148, 275
Mathematics	276
Matriculation Fee	20
Mechanical Engineering Technology	149, 279
Medical Assisting Technology	150, 280
Medical Coding Specialist Certificate	128
Medical Laboratory Technology	152, 281
Mental Health/Chemical Dependency/ Mental Retardation	154, 283
Mission Statement	inside front cover
Multi-Competency Health	159, 286
Music	289

N	
Natural Science	291
Nondiscrimination Policy	inside front cover
No Grade Reported	26
Non-Ohio, U.S. Residents (Fees)	20
Non-Resident Credit	22
Non-Resident Credit Fee	20
Nonprofit Management Certificate	88
Nuclear Medicine Technology	162, 291
Nursing	163, 294

O	
Off-Campus Centers	8
Office Administration	168, 282
Office of Career Services	35
Office Skills Certificate	169
Ohio Residents (Fees)	20

Ohio Transfer Policy	75
One-Time Fees	20
Organizations (Student)	39
Orientation to Trade and Apprenticeship Program (OTAP)	59
Other Marks	26

P	
Paralegal Studies	170, 301
Parking Regulations	23
Patient Care Skills Certificate	165
Peer Tutoring Program	40
Petition for Academic Review	28
Petition for Readmission	28
Petition to Graduate	30
Philosophy	304
Phlebotomy Certificate	161
Physics	305
Placement Tests	13
Political Science	306
Post-Secondary Enrollment	11
Practical Nurse Certificate Program	166, 307
Prior Learning Assessment Fee	20
Privacy Act	31
Probation	28
Proficiency Credit	24
Proficiency Examination Fee	20
Program of Study Change	29
Programs of Study/Course Descriptions	72
Psychology	308
Public Safety	37
Purchasing Certificate	179
Purchasing Major	179

Q	
Quality Assurance Technology	171, 309
Quarterly Academic Fees	20

R	
Radiography	172, 293
Readmission	28
Real Estate	174, 296
Reasonable Accommodations	inside front cover
Records and Transcripts	10, 31
Recreational Facilities	38
Refunds	21
Refunds and Repayments	17
Registered Respiratory Therapist Program	175
Registered Nurse First Asst. Certificate	166
Release of Records/Transcripts	21
Repeating Courses	29
Replacement Diplomas	30
Residency (tuition)	22
Residency Exceptions and Circumstances	22
Resident, Non-Resident, and International Student Status	22
Residential Construction Management Certificate	105

Residential/Light Commercial Certificate	130
Respiratory Care	175, 296
Retail Management	145
Retroactive Withdrawal Policy	29
ROTC (Army Reserve)	15

S

Satisfactory Academic Progress.....	27
Satisfactory Academic Progress (Financial Aid)	16
Scheduling.....	14
Scholarships	16
Selective Service System Registration.....	14
Senior Citizens “Good as Gold Educational Program”	13
Services to Students	33
Sexual Harassment Policy.....	40
Small Business Management Major	95
Social Sciences	315
Sociology	316
Southeast Center	8
Southwest Center at Bolton Field	8
Spanish	317
Sports	39
Sport and Exercise Studies.....	176, 317
Student Activities/Athletics	39
Student Assistance Center	13
Student Conduct.....	40
Student Handbook.....	40
Student Health Insurance	20
Student Organizations	39
Student Problem Resolution	40
Student Right to Know.....	41
Student Rights & Responsibilities	40
Student Rights Under the Family Education and Privacy Act of 1974 as Amended	31
Student Status.....	30
Student Success Testing Center	41
Study Abroad Programs	40
Supply Chain Management.....	179, 321
Surgical Technology.....	182, 322
Surveying	323
Surveying Certificate	98

T

Table of Contents	inside front cover
Tech Prep	42
Technical Communication	183, 324
Telecourses.....	62
Theater	325
Tolles Center	8
Tours	7
Training and Development Certificate.....	96
Training Programs for Business Industry and Government.....	43
Transcripts.....	21
Transfer Agreements	77
Transfer Credit	26
Transfer Module.....	75
Transfer Programs.....	72

Transfer Policy	75
Transient Student Fees	21
Transitional Workforce Department.....	59
Travel Industry Certificate	130
Travel/Tourism/Hotel Management Major	130
Travel/Study Abroad	38
TRIO Programs	41
Tuition.....	20
Tutoring Services	41

U

Upward Bound	42
--------------------	----

V

Verification (Financial Aid).....	16
Veterans Services	18
Veterinary Technology	185, 326
Video Courses—See Global Campus	62
Vision and Values.....	Inside Back Cover

W

Water/Wastewater Technology Certificate	123
Web Courses—See Global Campus.....	61
Web Designer: Digital Design Certificate.....	109
Webtech Digital Design Certificate.....	138
Welcome Center	7
Wellness Program	39
Westerville Center.....	8
Withdrawal Policy.....	29
Withdrawal Procedure.....	29

Y

Youth and Adult Automotive Training Center (Y.A.A.T.C.).....	91
---	----

Glossary of Terms

Ability to Benefit - Ability to Benefit states that students who do not have a GED or high school diploma can take a federally authorized test and pass all sections to determine their eligibility for federal aid.

ACT/SAT - College Entrance Exams recommended or required for admission to some colleges

ADA - Americans with Disabilities Act

Alumni - Graduates of a college or school.

American Sign Language (ASL) - Language for communicating with the deaf.

Apply to Columbus State Community College - To submit a completed admission application form.

Articulation - A specific agreement between two schools that guarantees the transfer of a degree from one school to another, for example, Columbus State A.A. or A.S. degree to Ohio State B.A. and B.S. degree.

Associate degree - The degree awarded if you successfully complete an associate degree program at Columbus State; also known as a two-year degree.

ASSET (Ford) - Two-year, cooperative training program (automotive related) sponsored by Ford Motor Company.

ASSIST Restriction (for students in Academic Difficulty) - Restriction placed on student's file who has been dismissed from the college due to unsatisfactory academic progress.

ATS degree (Associate of Technical Studies) - ATS degree enables a student to design an individualized program of study to fulfill a unique career goal. Student can select courses from up to four different technical programs.

Audit a Class - Process by which a student may take and pay for a class for information instruction only, no grade or credit received for the course.

Book buybacks - The Discovery Exchange Bookstore buys back used books during finals week of each quarter.

Bursar's Office - Another term used for the cashier's office.

Business & Industry - Division at CSCC that assists local businesses with on site or on-campus consulting services and training programs.

C.A.D. - Computer Aided Drafting produces computer assisted drawings for architecture or engineering related projects.

Cashier - Location where students can pay fees, parking fines, purchase discount tickets and other cash related functions. The Cashiers Office is located on first floor in Rhodes Hall.

C.A.T.S. - Computer Automated Touch/Tone System allows students to register for classes using the touch-tone option.

CET (Computer Enrichment Training) - Computer training program offered through Business & Industry Division.

Certificate - Document testifying that one has fulfilled requirements of either a course or series of courses.

CLEP - The College Level Exam Program that allows students to earn college credit for what they already know.

College work study - Provides part-time employment on campus to assist with college expenses for students with financial need.

Commencement - The graduation ceremony held four times a year at the close of each academic quarter.

COMPASS (Placement Tests) - Computerized placement testing for new students to identify the appropriate starting level for reading, writing and math courses.

Contact hour - An hour of in-class time.

Continuing education - Educational options available through noncredit courses and seminars designed to meet the licensing and certification needs of professionals in the community.

Contract training - Providing training and consulting services to companies.

Cooperative education (Co-Op) - Opportunity for students to bridge their program of study with career-related work experience.

Cougar Mail/Cougar Net - The free e-mail program for enrolled students/ The Internet Service Provider available to students for a quarterly fee.

Course description - A written statement that explains what will be taught in a class.

CPE - Continuing Professional Education courses offered at Columbus State Community College through noncredit coursework designed to meet licensing or certification needs.

Credit - Recognition by the college that you have successfully completed a course requirement leading to a degree or certificate.

Credit bank hours - This is an agreement between an employer and the college that allows for an exchange of the use of credit hours and internship hours.

Credit hour - The unit of measurement for college work that applies to a degree or certificate.

Curriculum - A series of courses that leads to a degree or certificate. The same as a program of study.

dBase - Data Base courses offered through the Computer Programming Technology at Columbus State Community College.

Distance learning - Classes delivered by video, on cable tv, PBS, via the Internet, or by teleconference.

Deferment (student loans) - Authorized period of time granted by the lender that a student does not need to make regular monthly payments toward their student loan.

Degree audit - Advising tool that provides a written report of courses in progress, courses completed, and courses remaining for completion of program or degree requirements.

Developmental Education courses - Courses provided to improve or refresh a student's skills in reading, writing and mathematics.

Diploma (Replacement Diploma) - Official record of graduation from or of a degree conferred by a school or college. Replacement Diploma can be obtained by submitting a written request attesting that the original diploma has been lost or destroyed.

DISCOVER - Computer-based assessment tool that surveys abilities, values, experiences and interests.

Drop a class - Process by which you withdraw from a class.

Duplicate fee receipt - A second copy of a student's original paid fee receipt.

Duplicate schedule/fee statement - A second copy of a student's original schedule and fee statement.

EDP auditing - Courses offered at Columbus State Community College that include accounting training with an emphasis toward systems analysis and programming.

Educable (Cable courses) - Cable channel that allows students to view televised classes.

Elective - A course that is not required in a degree or certificate program but that is counted in total hours required.

ERC - Educational Resources Center, also known as the Library or Columbus Hall.

Evening classes - Defined as classes that are offered during the week and begin at 5:00 p.m. or later.

Exam credit (Proficiency Credit) - Students who believe they possess the knowledge contained in a course may request of the academic department to take a proficiency exam.

Faculty -The College's instructors.

Fee payment - Students fees may include one or all of the following: quarterly academic fees, lab fees and or matriculation fees. Fees can be paid in the cashier office, over the telephone or by mail. All fees need to be paid by posted deadlines.

Fee refund appeal - If a student feels that the refund they received is not accurate, the student may fill out a tuition refund appeal from which is available in Records and Registration Dept. in Madison Hall.

Fee refund - Refund of fees sent for student-initiated withdrawals in accordance to the refund schedule for full quarter classes. The dates for refund guidelines can be found on the student class schedule and in the front of the quarter schedule

Financial aid - Available in various forms: grants, scholarships, loans, part time employment, and a Supplemental Educational Opportunity Grant (SEOG).

Fresh Start Rule - This is a rule that is intended to help students who were unsuccessful in their previous academic attempts.

Full-time student - A student who is taking 12 credit hours or more during the quarter

General education - Courses that give the student an introduction to the liberal arts and can be tailored to meet the student's interests and requirement of specific degree programs.

General Education Diploma Test (GED) - The GED is equivalent to a high school diploma and is accepted by most colleges and universities, and by military recruiters.

Good As Gold Program - This is a free tuition program that is offered to senior citizens who are 60 years old or older and fully retired.

Grade-point average - A mathematical way of computing academic performance by giving a value to each grade, multiplying the credit hours by the points, and dividing that total by the number of credit hours attempted.

Graduation requirements - The courses and competencies in the program of study that you have to complete successfully in order to qualify for a degree or certificate.

Grades - At the close of the term and upon the completion of a course, the instructor reports a letter grade indicating the quality of a student's work.

Grants - This is a type of financial assistance that is available to students who meet the eligibility criteria based on a federal formula.

Harassment - This can be defined as general misconduct, which may result in penalties, up to and including, dismissal from the college.

Health insurance (student) - All full-time students registered for credit and attending classes at Columbus State Community College are eligible for low cost group accident and sickness health care coverage.

Health record (Health Care Students) - Students in certain health care technologies will be required to have a physician's examination and might be required to have immunizations and laboratory blood studies completed prior to being accepted into health-related technology coursework.

HECC - The Higher Education Council of Columbus is an association of colleges and universities in Central Ohio.

Honors - Formal recognition of academic achievement.

Housing for Students - Columbus State Community College does not provide on campus housing options for its students. Information regarding off-campus housing options may be found in the Student Activities Office in Nestor Hall.

Identification cards - ID cards are required in order to use many campus related services or activities. These ID cards may be purchased at the Cashier's Office for a one time fee of \$4.00. - issued by the Public Safety Office.

Immigrant students - Students who have immigrated to the United States

International students - Students from another country who are enrolled at CSCC.

Internship - Approved on-the-job training in a work setting in which you earn credit hours towards graduation.

Intramural sports - On-campus, nonvarsity or nonintercollegiate sports.

Job Hot Line - A phone number to call for full or part-time employment while in college.

K-12 programs - CSCC programs that work with students in Kindergarten through 12th grade.

Laboratory lab hours - The time in the instructional plan that a student spends applying the theories presented in the lecture portion of a class.

Late payment of fees - Paying fees after the designated date; incurs a late fee.

Library - Located in Columbus Hall, the library is sometimes referred to as the Educational Resources Center, or ERC.

Life Experience Credit - College credit that can be earned for life or career experience; determined by testing.

Loan - Financial aid that must be repaid with predetermined terms.

Loan deferment - When a loan repayment is "put off" a certain amount of time.

M.L.T. program - Medical Laboratory Technology.

Miami 2+2 program - A degree program offered by Columbus State and Miami University, which pairs an associate degree with two more years of study to earn a bachelor's degree.

MindLeaders - Noncredit Web-based continuing education courses in professional and technical areas that may enhance employment skills.

Modular courses - Courses that are offered in shorter, self-contained units.

Multi-Competency Health - A degree program that offers courses in a variety of health-related areas.

Noncredit courses - Courses that do not offer college credit.

Nontraditional credit - College credit earned through means other than traditional classroom or distance learning.

Orientation - A formal or informal meeting for new students to become acquainted with the campus and student services at Columbus State.

O.N.O.W. - Ohio Nontraditional Occupations for Women program, offered by the Transitional Workforce Office at Columbus State.

Out-of-state status - A student whose permanent residence is outside the state of Ohio, or who has not maintained residency in Ohio for 12 months.

Parking ticket - Given for parking violations at Columbus State. Must be paid prior to registration each quarter and prior to graduation.

Part-time student - A student who is taking fewer than 12 credit hours of classes during a quarter.

Payment of fees - Can be accomplished in a variety of ways such as in person, by mail, or by phone. There is a deadline each quarter for payment without a late penalty.

Peer tutoring - A free service offered by the Developmental Education Department. Students tutor other students.

Phi Theta Kappa - A national student honorary society for two-year college students.

Placement test - A test given to students to determine the level of courses they are required to take in subjects such as writing, math and reading.

Prerequisite - A course that is required prior to scheduling another class. Students must pass prerequisite classes with a "C" or better prior to scheduling the next course in the series.

Program of study - A series of courses that leads to a degree or certificate through a specified curriculum.

Proficiency credit - College credit that is earned by testing for proficiency in a certain subject.

Proficiency test - A test for proficiency in a subject; can lead to proficiency credit being earned.

PSEO - The Post Secondary Enrollment Options program provides a way for current high school students to attend college, earning credit that satisfies both requirements.

Public Safety - The College's police department.

Quarter - A part of the academic year. There are four, 11-week quarters at Columbus State -- Autumn, Winter, Spring and Summer -- with breaks in between each quarter .

Records, Student - The records kept by Columbus State for the period of your enrollment, including grades, fees paid, classes taken, major declared, etc.

Refugee students - Students with pending approval of an application for permanent residency or refugee, asylum status.

Refund check - The money returned to you if you have dropped or been canceled from a class.

Registration - The process of selecting courses, choosing sections by day and hour, enrolling in classes and paying tuition and fees.

Remedial course - A course taken to learn pre-college skills in various areas such as mathematics or communication skills.

Residency requirement - The requirements to be considered a resident of the state of Ohio.

Schedule/scheduling - The list of classes you have registered for/ the process of registering for classes.

Scholarship - A sum of money awarded to a student in recognition of academic achievement for use in paying fees or other college expenses. Does not require repayment.

Section - The individual class meeting at a particular day and time with a specific instructor.

Selective Service Registration - Registration for the draft; required of all males citizens, age 18 and over.

Senior Citizen - Anyone age 60 or older.

S.O.A.R. - Adult re-entry into college program.

Spring Street - The title of the College's literary magazine, published annually by the Communication Skills department.

Student athlete - A student who is participating in varsity athletics at Columbus State, and who must maintain certain academic standards to participate.

Student Ambassador - Students who have been selected for a scholarship program which requires serving as "ambassadors" to groups and other students.

Student for a Day - A program for high school students which allows them to experience the college environment.

Teaching Learning Resource Center (TLRC) - The lab housed in Academic Center B in which students and faculty can experiment and be trained in methods of distance learning, teleconferencing, and more.

Tech-Prep program - A program for high school students in which they enroll in certain high school courses in preparation for a college degree program and career in the same area.

Teleconference - A meeting or class held simultaneously in more than one location, via fiber optic connection of video cameras.

Telecourse - A college course offered on videotape, on cable tv, or on public television .

TOEFL Exam - The Test of English as a Foreign Language required of foreign students at Columbus State.

Transfer credit - College credits earned at Columbus State or another college, that transfer as the same credits to another college or university.

Transfer Fair - Representatives from more than 50 colleges visit the campus and bring information about their transfer programs to CSCC students.

Transfer program - A program offered by Columbus State which has been designed to transfer credits to other colleges

or universities in preparation for continuing with a higher degree such as a bachelor's or master's degree.

Transcript - A record of courses taken, grades earned, honors received, and degrees awarded at a previous educational institution, including high school or other colleges attended.

Tuition - The money a student pays for instruction at any college. Fees and book costs are usually additional.

Tuition reimbursement - The money a student can receive back from a company or employer that pays for college courses taken by their employees. Usually paid back after the course has been satisfactorily completed.

Tuition refund - The money refunded to a student after he/she withdraws from a class.

Veteran - A person who has served in the United States military and earned benefits as a result of completion of service.

Veteran's benefits - The benefits earned by veterans of the U.S. military, which include the cost of a college education.

Video-based course - College courses that are offered by Columbus State on videotape, on cable television, or on public television.

Voucher - A statement of the funds available to pay fees from a grant.

Weather closing - A formal cancellation of classes forced by inclement weather; always announced via the broadcast media. (listed in the College's *Schedule of Classes*)

Withdrawal form - The form required by a student who wishes to withdraw from a class he/she has scheduled, paid for, and attended for a specified period of time.

Web-based course - Courses offered via the Internet, or on campus using an online computer lab.

Work study - A student in the federal work study program, working no more than 20 hours a week while enrolled at the College.

Writing Center - The Developmental Education lab in Franklin Hall in which students can receive tutoring and academic assistance.

