COLUMBUS STATE
COMMUNITY COLLEGE

Columbus State Community College
Mathematics Department

COURSE: MATH0114 Basic Math& Prealgebra **INSTRUCTOR:**

CREDITS: 3 **CLASS HOURS PER WEEK:** 4 (2-lecture, 2-Lab) **PREREQUISITES:** By placement

DESCRIPTION OF COURSE: This course includes standard basic mathematics and pre-algebra content including whole numbers, fractions, decimals, integers, expressions, linear equations, and application problems. Computer technology is used in a laboratory environment for assessments and to support active learning. Not open to students with credit for MATH 1024 or higher.

STUDENT LEARNING OUTCOMES: The goal of this course is to develop students' foundational numerical and algebraic skills required in future mathematics courses. A grade of "C" or better is required to move on to the next math course.

INSTITUTIONAL LEARNING GOALS:
Columbus State Community College's Institutional Learning Goals are an integral part of the curriculum and central to the mission of the college. For this course, students are expected to demonstrate the skills associated with the Institutional Learning Goals identified below:

- #1: Critical Thinking
- #3: Quantitative Skills

In class, students are assessed on achievement of these outcomes. Names will not be used when reporting results. Outcomes-based assessment is used to improve instructional planning and design and the quality of student learning throughout the college.

COURSE MATERIALS REQUIRED:
TI-30XS MultiView Calculator
Computer/internet access
ALEKS-360 Subscription (included in tuition)

TEXTBOOKS, MANUALS, REFERENCES, AND OTHER READINGS:
Prealgebra by Miller/O'Neill/Hyde (E-book)
ALEKS online homework/assessment system

GENERAL INSTRUCTIONAL METHODS
Lecture/practice handouts and/or online video/exercises

STANDARDS AND METHODS FOR EVALUATION

Students who fail to take any assessment by the assigned date will receive a 0%. Exceptions require official documentation.

The Final Exam will be a proctored cumulative exam. Students will come to campus during final exam week to take their final. If a student cannot come to campus, alternate arrangements must be made to take the final exam in a proctored environment.

GRADE SUMMARY

Homework Exercises = 25%
Participation= 5%
4 Midterms (10% each) = 40%
Final Exam (Comprehensive) =30%

GRADING SCALE

90% - 100% = A
80% - 89% = B
70% - 79% = C
60% - 69% = D
below 60% = E/EN*

*An E represents a failing grade and that a significant portion of the coursework was attempted by the student.

*An EN represents a failing grade and that a significant portion of the coursework was not attempted by the student.

SPECIAL COURSE REQUIREMENTS

Computer/internet access is required to complete online homework assignments

ATTENDANCE POLICY

Attendance is required. The MATH 0114 Attendance Policy is posted on Blackboard.

INCLEMENT WEATHER OR OTHER EMERGENCIES

In the event of severe weather or other emergencies that could force the college to close or to cancel classes, such information will be broadcast on radio stations and television stations. Students who reside in areas that fall under a Level III emergency should not attempt to drive to the college even if the college remains open. Assignments due on a day the college is closed will be due the next scheduled class period. If an examination is scheduled for a day the campus is closed, the examination will be given on the next class day. Students who miss a class because of weather-related problems when the class is held as scheduled are responsible for reading and other assignments as indicated in the syllabus.

COLLEGE SYLLABUS STATEMENTS

Columbus State Community College-required College Syllabus Statements on College Policies and Student Support Services can be found at www.cscc.edu/syllabus, or on the college website Quick Links "Syllabus Statements." Some of the CSCC syllabus statements may be included on the syllabus for the course, but the link will lead you to the most complete and updated information. Please read all of the information at this site to ensure that you are aware of campus services, your rights, and your responsibilities. (In the event that information has changed since the creation of the course syllabus, the information on the website supersedes that on the syllabus: http://www.cscc.edu/academics/syllabus.shtml .)

Weekly course schedule indicating the units of instruction, learning objectives/ goals, assigned readings, assignments, and assessment methods.

Week 1

- **Unit of Instruction:** Introduction to Whole Numbers, Addition and Subtraction of Whole Numbers and Perimeter, Rounding and Estimating, & Multiplication of Whole Numbers and Area
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 1.2-1.5 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 2

- **Unit of Instruction:** Division of Whole Numbers, Exponents and the Order of Operations, Mixed Applications and Computing Mean, & Integers, Absolute Value, and Opposite
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 1.6-2.1 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 3

- **Unit of Instruction:** Addition of Integers, Subtraction of Integers, Multiplication and Division of Integers
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 2.2-2.4 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 4

- **Unit of Instruction:** Review for Midterm 1
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Midterm 1 Review
- **Assessment Methods:** Midterm 1

Week 5

- **Unit of Instruction:** Variables, Order of Operations and Algebraic Expressions, & Simplifying Expressions and Combining Like Terms
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 1.7, 2.5, & 3.1 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 6
- **Unit of Instruction:** Addition and Subtraction Properties of Equality, Multiplication and Division Properties of Equality, & Solving Equations with Multiple Steps
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 3.1-3.4 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 7
- **Unit of Instruction:** Applications and Problem Solving & Calculator Workshop
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Section 3.4 on ALEKS
- **Assessment Methods:** Homework Completion

Week 8
- **Unit of Instruction:** Introduction to Fractions and Mixed Numbers, Simplifying Fractions, & Review for Midterm 2
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 4.1-4.2 on ALEKS, & Midterm 2 Review
- **Assessment Methods:** Midterm 2 & Homework Completion

Week 9
- **Unit of Instruction:** Multiplication and Division of Fractions, Least Common Multiple and Equivalent Fractions, & Addition and Subtraction of Fractions
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 4.3-4.5
- **Assessment Methods:** Group Activities & Homework Completion

Week 10
- **Unit of Instruction:** Estimation and Operations on Mixed Numbers, Order of Operations and Complex Fractions, Solving Equations Containing Fractions, Decimal Notation and Rounding
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 4.6-5.1 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 11
- **Unit of Instruction:** Addition and Subtraction of Decimals, Multiplication of Decimals and Applications with Circles, Division of Decimals, & Fractions, Decimals, and the Order of Operations
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 5.2-5.5 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 12
- **Unit of Instruction:** Solving Equations Containing Decimals & Midterm 3 Review
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Section 5.6 on ALEKS & Midterm 3 Review
- **Assessment Methods:** Midterm 3 & Homework Completion

Week 13
- **Unit of Instruction:** Ratios, Rates, & Proportions
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 6.1-6.3 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 14
- **Unit of Instruction:** Applications of Proportions and Similar Figures, Percent, Fractions, and Decimals, & Percent Proportions and Applications
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Homework Sections 6.4-7.2 on ALEKS
- **Assessment Methods:** Group Activities & Homework Completion

Week 15
- **Unit of Instruction:** Review for Midterm 4 & Final Exam
- **Learning Objectives/Goals:** Critical Thinking & Quantitative Skills
- **Assignment:** Midterm 4 Review & Final Exam Review
- **Assessment Methods:** Midterm 4