Columbus State Community College  
Mathematics Department Course Syllabus  

Course Number: MATH 1123  
Course Name: Quantitative Reasoning  
Prerequisite: MATH 1075 or higher or placement equivalent  

CREDITS: 3          CLASS HOURS PER WEEK: 4

Semester/Year: Autumn, 2019  
Instructor:  

Office: Phone: Email:  

Office Hours:  

It is expected that all dates, methods of evaluation, and other items addressed in this syllabus will remain as stated on this syllabus. However, it is possible that some of these items, as well as other portions of this syllabus, may change. You, the student, are responsible for any announcements made either in class or under the Announcements tab of the course website that might alter items within this syllabus (e.g., dates of exams).

COURSE DESCRIPTION  
This college level mathematics course is designed for students seeking non-STEM degrees. It is a quantitative reasoning course focusing on thought processes involved when investigating situations described by measurements. Three threads define the curriculum: Numeracy—students will develop and use the concepts of numeracy to investigate and explain quantitative relationships and solve problems in a variety of real-world contexts. Mathematical Modeling—students will make decisions by analyzing mathematical models, including situations in which the student must recognize and/or make assumptions. Probability and Statistics—students will use the language and structure of statistics and probability to investigate, represent, make decisions, and draw conclusions from real-world contexts. The classroom is designed to be an active learning experience supported by student communication.

UNITS OF INSTRUCTION  
- Numeracy  
- Mathematical Modeling  
- Probability & Statistics

INSTITUTIONAL LEARNING GOALS  
This course addresses the following Columbus State general education goals:  
- Critical Thinking  
- Quantitative Literacy  
- Effective Communication

Refer to the Daily Schedule document for a daily schedule indicating the sections covered, the quizzes and assignments due dates, the Exam schedule, etc.

GENERAL INSTRUCTIONAL METHODS  
Instructional methods may include face-to-face or video lectures or demonstrations, face-to-face or virtual discussion, individual or group activities including the use of visual aids, calculators, computers and/or other technologies. Students may be expected to participate in these activities during class and/or outside of class. Instructors may require class participation, collaborative learning, and peer review.
LAST DAY TO WITHDRAW FROM COURSE
If you should decide to drop this course, but do not officially do so through Records & Registration, a failing grade will be recorded on your transcript. The last day to drop this course is **Thursday, October 31, 2019**. No drops will be allowed after that date. Drop forms are available from the Counseling/Advising Center and from Records and Registration.

ATTENDANCE POLICY
Since this class requires extensive group work, attendance is required. In fact, part of your participation grade is based on your coming to class on time and staying the entire class period so you can participate.

To achieve a mastery of the course material, the Ohio Department of Higher Education expects that the average student should be prepared to spend an average of 144 hours (9 hours per week for 16 weeks) on this course to receive an average grade.

TUTORING RESOURCES
The following are ways of obtaining free tutoring:

- The Learning Resource Center (DH room 314) during the posted hours. **You will be required to sign in and out using your CougarID number.** Tutoring is also available at the Dublin, Westerville and Reynoldsburg branch locations. LRC hours at these locations change each semester. For additional information, please visit: [http://www.csc.edu/academics/departments/math/tutoring.shtml](http://www.csc.edu/academics/departments/math/tutoring.shtml)
- Peer Tutoring – sign up for Peer Tutoring in the Center for Workforce Development, WD 1095.
- Nettutor – More online tutoring. Nettutor is a college partner. They provide free online tutoring. Login through Blackboard. Look for the green “n”:

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TEXTBOOKS, MANUALS, REFERENCES, AND OTHER REQUIRED MATERIALS

- A basic scientific calculator or graphing calculator is REQUIRED. The Texas Instruments' TI-84 (regular, Plus, Silver, etc.) graphing calculator is the department standard calculator. However, any basic scientific calculator or other graphing calculator (such as the CASIO-FX-9750GII, TI-Nspire (non CAS version), or TI-83) is sufficient for use in this course.

Your instructor may require that your graphing calculator’s memory be reset (all RAM cleared) prior to each proctored assessment. Additional resources supporting the use of the TI-84 and CASIO-FX-9750GII may be available at: [http://www.cscc.edu/academics/departments/math/graphing-calculator.shtml](http://www.cscc.edu/academics/departments/math/graphing-calculator.shtml).

- Other materials provided.

ACADEMIC ASSESSMENT STATEMENT
Columbus State Community College is committed to assessment (measurement) of student achievement of academic outcomes. This process addresses the issues of what you need to learn in your program of study and if you are learning what you need to learn. The assessment program at Columbus State Community College has four specific and interrelated purposes:

1) to improve student academic achievement;
2) to improve teaching strategies;
3) to document successes and identify opportunities for program improvement;
4) to provide evidence for institutional effectiveness.

In class, you are assessed and graded on your achievement of the outcomes for this course. You may also be required to participate in broader assessment activities.

**STANDARDS AND METHODS OF EVALUATION AND MAKE-UP POLICIES**

The grades will be determined by the total number of points accumulated at the end of the semester. There will be a total of 1000 possible points given as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>200</td>
</tr>
<tr>
<td>Test #1</td>
<td>150</td>
</tr>
<tr>
<td>Test #2</td>
<td>150</td>
</tr>
<tr>
<td>Homework</td>
<td>200</td>
</tr>
<tr>
<td>Project</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1000</td>
</tr>
</tbody>
</table>

It is expected that 900 points (90%) will be an A, 800 points (80%) a B, 700 points (70%) a C, 600 points (60%) a D, and anything less is failing.

- **Participation:**
  It is **VITAL** that you attend class sessions for this course. Because of this, there are **8 participation points** to be earned during **each class session** except test days. The 8 points will be awarded according to the following:

  - **2 points** – Attendance – Attends entire class session
  - **2 points** - Completion - Activity/Activities for the class session were completed along with the rest of the class
  - **2 points** - Discussion/Contribution - Contributed to the group and/or full class discussion of various parts of the activities
  - **2 points** - Quality - Clear care and effort was put into the daily contribution(s) and any work to be turned in.

  At the end of the semester, the **two lowest participation grades will be dropped** from each student’s total score. This is to allow for possible emergencies and absences throughout the semester. **There will be no “make-ups” for missing a class session.** However, students are responsible for the material covered during the class. Activities and homework will be posted on Blackboard.

- **Tests:**
  Tests will be given in class and the questions will be similar to the types of activity and homework problems you have done where you are required to think critically to solve the problems. You will have the entire class period to finish the test.

  If you must miss a test, please let me know as soon as possible. You will be expected to make up the test within a week of your absence. Make-up tests for the math department are scheduled for Wednesdays, 5:00 -7:00 pm and Fridays, 11:00 am – 1:00 pm.
Homework:
I will take homework problems to grade most class weeks. The first 10 points of each assignment will be based upon the percentage of problems you attempted. The last 10 points of the assignment will be based on one or two problems that I choose to grade from that assignment. You will not know beforehand which problems I will choose. I will use the following rubric to grade the problems I choose.

<table>
<thead>
<tr>
<th>Grading Rubric Points</th>
<th>Description</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Very good</td>
<td>Correct mathematics that is carefully thought out and concisely yet thoroughly explained.</td>
</tr>
<tr>
<td>5</td>
<td>Good</td>
<td>Correct mathematics with an emerging but incomplete explanation.</td>
</tr>
<tr>
<td>3</td>
<td>Basic</td>
<td>Correct mathematics but little or no explanation OR largely correct mathematics with an emerging explanation that shows some understanding.</td>
</tr>
</tbody>
</table>

Homework will be due most Thursdays. I will take homework up to one class period late with a 20% penalty. **After that date, I will not accept the homework for any grade.** (If you must miss the day a homework is due, you may scan or snap a picture of the completed assignment and send me a copy via email.) The lowest homework grade will be dropped.

- Project:
The details of the project will be given out later in the semester

- Final Exam: The final exam is comprehensive. It will be given in your regular classroom, DH 310, on May 7 at noon-1:50 pm.