Moberly Area Community College  
Common Syllabus  

MTH010 Fundamentals of Mathematics  

Instructor:  
Office number:  
Office hours:  
Contact information:  
Classroom number:  
Class days and time:  

Course Description:  MTH010 Fundamentals of Mathematics  
Fundamentals of Math is designed to review and/or establish basic skills with integers, 
fractions, decimals, ratios, and percents. Students are introduced to variables, basic linear 
equations, proportions, metric and U.S. customary unit conversions, geometry formulas, slope 
and slope-intercept form. (FA, SP, SU)  

Prerequisite/Co-requisite:  None.  

Text:  The text is an eBook included with the class. There is no print option available in the 
MACC bookstore.  
Text:  Prealgebra  
Author:  Lial, Hestwood  
Publisher:  Pearson  

Other Required Materials:  scientific calculator (recommended TI-30XS Multiview)  
Department Recommendation:  Three ring notebook, dividers, filler paper are strongly  
recommended to help students learn organization.  

Purpose of Course:  
The purpose of Fundamentals of Math is to enable the student to significantly improve his/her 
mathematical skills. This is accomplished through a demonstration of methods, homework, 
group work, computer work as well as formal and informal assessments. Through improved 
math skills, the student is better prepared to be successful in his/her subsequent courses.  

It is also the purpose of all developmental classes to help each student become successful 
through the development of a variety of college study skills.
Course Objectives:
Upon successful completion of this course, students will be able to understand and solve problems involving:
- Integers
- Solving linear equations
- Problem solving
- Fractions
- Decimals
- Ratios and proportions
- Percents
- Introduction to graphing
- Unit conversions (Metric and U.S. customary)

Course Content:
Chapter 1: Introduction to Algebra: Integers
Chapter 2: Understanding Variables and Solving Equations
Chapter 3: Solving Application Problems
Chapter 4: Rational Numbers: Positive and Negative Fractions
Chapter 5: Rational Numbers: Positive and Negative Decimals
Chapter 6: Ratio, Proportion, and Line/Angle/Triangle Relationships
Chapter 7: Percent
Chapter 8: Measurement
Chapter 9: Graphs and Graphing

Assessment of Student Learning:
A pretest and a posttest will be given in class to measure significant change in mastery of the material over the semester.

Grades will be calculated in the Canvas gradebook where 70% mastery will be necessary for satisfactory completion of the course. A grade of less than 70% will result in the student being required to repeat the course. Grades will be updated at least after each chapter test throughout the semester in the Canvas gradebook.

The grading scale will be structured as follows:
A – 90-100%
B – 80-89%
C – 70-79%
D – 60-69% (Students receiving a D will be required to repeat the course.)
F – 0-59%

Points will be accumulated by:
Homework/Quizzes/Projects: 20%
Chapter/Unit Tests: 60%
Final Exam: 20%

In order to help students reach a 70% mastery of the subject matter, students scoring less than a 70% on a test will be allowed to retake the test one time only. The retake must be completed before the next chapter test. The retake score will be used for that chapter test, better or
worse. If a student does not take a test when it was scheduled, it will be scored as a zero with the opportunity to replace the original grade of zero with the retake test grade.

Expected Study Time Commitments: Students should expect to spend approximately 2 to 4 hours per week studying, reading, and working on assignments for each registered credit hour. For example, 6 to 12 study hours per week may be expected for a 3 credit hour class.

Make-up and late work: Per instructor’s policy

Schedule of Student Assignments/Activities: Instructors will identify a Student Assignment/Activities schedule. Instructors have the prerogative to construct the schedule by class periods or weeks in order to cover the entire curriculum. A sample schedule is attached.

Statement to Connect Course with General Education Outcomes: In compliance with MACC’s General Education outcomes, the student who successfully completes this course will be able to:

- Higher Order Thinking: Students will demonstrate the ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; to solve problems by applying evaluative standards; and to reflect upon and refine those problem-solving skills. This outcome involves creative thinking, critical thinking, and quantitative literacy.

College / Instructor Policies:

Academic Dishonesty: MACC board policy is as follows: “Academic dishonesty by students damages institutional credibility and unfairly jeopardizes honest students; therefore, it will not be tolerated in any form.” Forms of academic dishonesty include but are not limited to the following: violations of copyright law, plagiarism, fabrication, cheating, collusion, and other academic misconduct. Incidents of dishonesty regarding assignments, examinations, classroom/laboratory activities, and/or the submission of misleading or false information to the College will be treated seriously. The procedure for handling academic dishonesty is outlined in the Student Handbook (Policy Handbook, M.010). In cases of alleged academic dishonesty, the burden of proof is on the student, not on the instructor.

Attendance Policy: Students are expected to attend all class sessions for which they are enrolled. The College reserves the right to drop or withdraw students from courses due to lack of attendance.

Students need to be aware that dropping/being dropped from a course and their last date of attendance in the course may impact their financial aid.

MACC faculty are required to track attendance and report lack of attendance. An instructor must complete the appropriate steps to drop a student within one week following the
student’s violation of the attendance policy. Additionally, a student’s attendance rate will be calculated based upon the first day the academic session begins (not the student’s date of enrollment in the course). If a student does not attend a course as defined below, the student will be dropped as “Never Attended.”

**Term Length Drop Calculations**

<table>
<thead>
<tr>
<th>Term Length</th>
<th>Drop Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-week:</td>
<td>Any student who misses two (2) consecutive weeks of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.</td>
</tr>
<tr>
<td>8-week:</td>
<td>Any student who misses one (1) consecutive week of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.</td>
</tr>
<tr>
<td>4-week:</td>
<td>Any student who misses two (2) consecutive days of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.</td>
</tr>
<tr>
<td>Intersession:</td>
<td>Any student who misses one (1) day of class will be dropped from the course by the instructor unless acceptable justification is provided by the student and the student still has the opportunity to be successful in the course.</td>
</tr>
</tbody>
</table>

Acceptable justification may include, but is not limited to, family emergencies, illness or injury, college-approved co-curricular and extra-curricular activities, and religious holidays.

**Definition of Course Attendance**

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Attendance Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Seat Course</td>
<td>Physically attending scheduled, face-to-face, class meetings</td>
</tr>
<tr>
<td>Virtual Course</td>
<td>Being present, via appropriate platform, for scheduled class meetings/activities</td>
</tr>
</tbody>
</table>
| Hybrid Course     | Physically attending scheduled, face-to-face, class meetings and active participation in the online portion of the course which may include any or all of the following:  
  - Completion of quizzes or exams during class meetings and online  
  - Submission of assignments during class meetings and online  
  - Participation in discussions during class meetings and online |
Online Course

Active participation in an online course includes the following:

- Completion of quizzes or exams
- Submission of assignments
- Participation in threaded discussions

Simply logging into the Learning Management System (Canvas) and/or accessing the course and course related material does not constitute active participation for the online component of hybrid courses or for online courses. (*Policy Handbook*, I.090 & M.095)

**Tardiness:** Per instructor’s policy in relationship to points given in the course and not in relationship to attendance.

**Student Email:** MACC Mail is the official student email system at MACC. Official college communication is sent via this email system. Students are responsible for checking their MACC Mail account regularly. Students may also receive notifications and reminders from MACC through the online learning platform. However, students should remain aware that the online learning platform messaging system and MACC Mail (student email) system are two separate systems.

**ADA Statement:** Students who have disabilities that qualify under the Americans with Disabilities Act may register for assistance through the Office of Access and ADA Services. Students are invited to contact the Access/ADA Office to confidentially discuss disability information, academic accommodations, appropriate documentation and procedures. The Office of Access and ADA Services is located in the Main Library and the phone number is (660) 263-4110 ext. 11240. Students may also contact the Columbia office at 573-234-1067 ext. 12120.

**Title IX Statement:** MACC maintains a strict policy prohibiting sexual misconduct in any form, including sexual harassment, sexual discrimination, and sexual violence. All MACC employees, including faculty members, are considered mandated reporters of sexual misconduct and as such are expected to contact the Title IX Coordinator when they become aware, in conversation or in writing, of an incident of sexual misconduct. For more information on this policy or to learn about support resources, please see [http://www.macc.edu/sexual-misconduct-policy](http://www.macc.edu/sexual-misconduct-policy) (links to an external site) or contact Ms. Cheryl Lybarger, MACC’s Title IX Coordinator, at 660-263-4110, ext. 11369 or CherylLybarger@macc.edu.
### Sample Schedule for MTH010 – Fundamentals of Math

<table>
<thead>
<tr>
<th>Week</th>
<th>Course Activities</th>
<th>Additional Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Course introductions and Course Pre-test 1.2 Introduction to Integers</td>
<td>1.8 Exponents &amp; Order of Operations 2.1 Introduction to Variables</td>
</tr>
<tr>
<td>Week 2</td>
<td>2.2 Simplifying Expressions 2.3 Solving Equations Using Addition</td>
<td>2.4 Solving Equations Using Multiplication</td>
</tr>
<tr>
<td>Week 3</td>
<td>2.5 Solving Equations with Several Steps</td>
<td>Unit 1 Test</td>
</tr>
<tr>
<td>Week 4</td>
<td>3.1 Problem Solving: Perimeter 3.2 Problem Solving: Area</td>
<td>3.3 Solving Applications with One Unknown</td>
</tr>
<tr>
<td>Week 5</td>
<td>3.4 Solving Applications with Two Unknowns</td>
<td>4.1 Introduction to Signed Fractions 4.2 Writing Fractions in Lowest Terms</td>
</tr>
<tr>
<td>Week 6</td>
<td>4.6 Exponents, Order of Operations &amp; Complex Fractions</td>
<td>4.7 Problem Solving with Fractions</td>
</tr>
<tr>
<td>Week 7</td>
<td>4.8: Geometry Applications: Area and Volume</td>
<td>Unit 2 Test</td>
</tr>
<tr>
<td>Week 8</td>
<td>5.1/5.2 Reading, Writing &amp; Rounding Decimal 5.3/5.4/5.5 Add, Subtract, Multiply and Divide Signed Decimals</td>
<td>5.6 Fractions and Decimals</td>
</tr>
<tr>
<td>Week 9</td>
<td>5.9 Problem Solving with Decimals</td>
<td>6.1/6.2 Ratios and Rates</td>
</tr>
<tr>
<td>Week 10</td>
<td>6.3/6.4 Proportions and Problem Solving</td>
<td>Unit 3 Test</td>
</tr>
<tr>
<td>Week 11</td>
<td>7.1 The Basics of Percent 7.2 Percent Proportions</td>
<td>7.3 Percent Equations</td>
</tr>
<tr>
<td>Week 12</td>
<td>7.4 Problem Solving with Percent</td>
<td>8.1 Problem Solving with U.S. Measurement Units</td>
</tr>
<tr>
<td>Week 13</td>
<td>8.2 The Metric System - Length</td>
<td>8.3 The Metric System – Capacity and Weight (Mass)</td>
</tr>
<tr>
<td>Week 14</td>
<td>Unit 4 Test Review</td>
<td>Unit 4 Test</td>
</tr>
<tr>
<td>Week 15</td>
<td>9.4 The Rectangular Coordinate System 9.5 Introduction to Graphing Linear Equations</td>
<td>Final Exam Review</td>
</tr>
<tr>
<td></td>
<td>Final Exam Week</td>
<td></td>
</tr>
</tbody>
</table>