

Moberly Area Community College

Common Syllabus

MTH010 Fundamentals of Mathematics

Current Term

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

Course Description: MTH010 Fundamentals of Mathematics (3-0-3)
Fundamentals of Math is designed to review and/or establish basic arithmetic skills with integers, fractions, decimals, ratios, and percents. Students are introduced to variables, basic linear equations, proportions, geometry formulas, slope and slope-intercept form. (FA, SP, SU)

Prerequisite/Co-requisite: None.

Text(s): No print book required.

For MTH010 an ebook is included in your course resource fees. No print books are available for this class.

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.

NOTE: Calculators are NOT allowed in the first half of this course.

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
- Linear equations
- Problem solving
- Fractions
- Decimals
- Ratio and proportion
- Percent
- Introduction to graphing

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 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 **75% mastery will be necessary for satisfactory completion of the course.** A grade of less than 75% 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 - 92 - 100%
B - 83 - 91%
C - 75 - 82%
D - 60 - 74% (Students receiving a D will be required to repeat the course.)
F - 59% or below

Points will be accumulated by:

Homework/Quizzes/Projects: 20%
Chapter/Unit Tests: 60%
Final Exam: 20%

In order to help students reach a 75% mastery of the subject matter, students scoring less than a 75% 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.

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 or Technical Program Outcome Statement:

In compliance with MACC's General Education outcomes, the student who successfully completes this course will be able to:

- II. Demonstrate an understanding of scientific principles and computational skills and how to use them to solve problems and make informed decisions.
 - d. The student will demonstrate the ability to use math and/or logic as formal symbolic systems in computation and/or analytical thinking.

College 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: Any student who misses two consecutive weeks of class during a regular sixteen-week semester or the equivalent proportion of class time during a shorter session will be dropped from the class by the instructor unless acceptable justification is supplied. An instructor must complete and file the appropriate forms to drop the student within one week following the student's violation of the attendance policy. Additionally, any student who misses more than one-fourth of the entire number of in-seat class meetings in a regular 16-week semester or the equivalent proportion of class time during a shorter session, may be dropped from that class by the instructor if, in the opinion of the instructor, the student does not have reasonable opportunity to succeed in the class. A student's attendance rate will be calculated based upon the first day of the semester (not the student's date of enrollment in the course.)

Student attendance must be defined in a different manner for online, hybrid, and virtual courses. Student attendance in these courses is defined as active participation in the course. Online, hybrid, and virtual courses will, at a minimum, have weekly mechanisms for student participation, such as any or all of the following methods:

- a. Completion of quizzes or exams
- b. Submission of assignments
- c. Participation in threaded discussions
- d. Communication with the instructor

A student who does not participate in an online, hybrid, or virtual course for two consecutive weeks will be dropped by the instructor unless acceptable justification is supplied. An instructor must complete and file the appropriate forms to drop the student within one week following the student's violation of the attendance policy. As with ground courses, a student's attendance rate in online courses will also be calculated based upon the first day of the semester. If a student does not demonstrate active participation in the online course within the first two weeks (or the equivalent proportion of class time during a short session), the student will be dropped as "never attended." Simply logging into an online class does not constitute active participation.

Students should be aware that their dropping a course and their last date of attendance in the course may impact their financial aid. (Policy Handbook I.090 and 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> or contact Dr. Jackie Fischer, MACC's Title IX Coordinator, at [660-263-4110](tel:660-263-4110), ext. [11236](tel:660-263-4110) or jackief@macc.edu.

Sample Schedule for MTH010 – Fundamentals of Math

NO CALCULATORS		
Week 1	Course introductions and Course Pre-test 1.2 Introduction to Integers	1.3 Adding Integers 1.4 Subtracting Integers
Week 2	1.6 Multiplying Integers 1.7 Dividing Integers	1.8 Exponents & Order of Operations Chapter 1 Review
Week 3	Test Unit 1 (Chapter 1)	2.1 Introduction to Variables 2.2 Simplifying Expressions
Week 4	2.3 Solving Equations Using Addition 2.4 Solving Equations Using Multiplication	2.5 Solving Equations with Several Steps
Week 5	3.3 Solving Applications with One Unknown	Finish 3.3 3.4 Solving Applications with Two Unknowns
Week 6	Finish 3.4 Chapter 2 and 3 Review	Test Unit 2 (Chapters 2 and 3)
Week 7	4.1 Introduction to Signed Fractions 4.2 Writing Fractions in Lowest Terms	4.3 Multiplication & Division of Fractions 4.5 Mixed Number Multiplication & Division
Week 8	4.4 Addition & Subtraction of Fractions 4.5 Mixed Number Addition & Subtraction	4.6 Exponents, Order of Operations & Complex Fractions
Week 9	Finish 4.6	5.1/5.2 Reading, Writing & Rounding Decimal 5.6a Writing Decimals as Fractions
Week 10	Unit 3 Review	Test Unit 3 (Sections 4.1- 4.6, 5.1, 5.2, and 5.6a)
CALCULATORS MAY NOW BE USED		
Week 11	5.3/5.4/5.5 Add, Subtract, Multiply and Divide Signed Decimals 5.6b Converting Fractions to Decimals 5.9 Problem Solving with Decimals	Finish 5.9 4.7 Problem Solving with Fractions
Week 12	6.1 & 6.2 Ratios and Rates	6.3/6.4 Proportions and Problem Solving
Week 13	7.1 The Basics of Percent 7.2/7.3 Percent Proportions & Equations	7.4 Problem Solving with Percent
Week 14	Test Unit 4 (Sections 4.7, 5.9, 6.1-6.4, 7.1-7.4)	9.4 The Rectangular Coordinate System 9.5 Introduction to Graphing Linear Equations
Week 15	Post Test, Course Evaluations, Final Review	Final Exam Review
Final Exam Week		