

Fall 9-1-2018

M 090.06: Introductory Algebra

Blake P. Miller

University of Montana - Missoula, Blake.Miller@umontana.edu

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

Recommended Citation

Miller, Blake P., "M 090.06: Introductory Algebra" (2018). *Syllabi*. 9066.
<https://scholarworks.umt.edu/syllabi/9066>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.

Instructor: Blake Miller

Email: blake.miller@umontana.edu

Office: MC325

Text: MyLabsPlus eText (online access included with course)

*Printed copy optional (order through UM Bookstore)

MTLC: Math Technology Learning Center, Missoula College, Room 230

WELCOME TO INTRODUCTORY ALGEBRA! M090 is a one-semester mathematics course for students who have not yet mastered the first year of high school algebra, or for those who need a refresher course — particularly those students intending to take M095, Intermediate Algebra; M115, Probability and Linear Mathematics; M105, Contemporary Mathematics; or M104, Numbers as News. M090 does not substitute for any other mathematics requirement, nor does it fulfill the general education mathematics requirement

PLACEMENT in M090 is based on your individual mathematics assessment (Maplesoft) or completion of M065 (Prealgebra) with a grade of RC- or better. The “R” designation indicates that this is a “developmental course,” designed to help you prepare for college level coursework. Developmental course credits do not count toward graduation or affect your GPA, but these credits do count for financial aid, Four Bear progress, the tuition flat-spot, and toward full- or part-time status. All developmental course grades carry the “R” designation.

*Be certain that you are enrolled in the proper math class at the beginning of the semester. You may not be able to switch into a more appropriate class after the first week. If you have any concerns about your placement see your instructor immediately.

WHY DO WE STUDY ALGEBRA? Algebra allows us to solve problems for unknown quantities, draw graphs of relationships between numbers, and make use of the inherent structure of our number system, but the larger and more important goal in this course is to learn abstract reasoning. This deeper thinking allows us to draw from our mental toolboxes to solve certain types of problems.

This course has been designed for you, the student. Consistent participation and practice is the key to success. Please come to class on time and ready to take notes. If we can have a motivated, friendly, and enthusiastic class, we will be able to try new things and have a good time while we all learn together. Regular practice outside of class is essential for learning new skills and concepts. No matter how you feel about studying math, it is important to take personal responsibility and approach this subject with a solid work ethic.

MyLabsPlus Online Course Materials: This course utilizes an innovative online learning system called MyLabsPlus. This includes your online textbook, assignments, and many resources to support your learning. To access your course materials, click on the “MyLabsPlus” icon at my.umt.edu. Login with your UM NetID.

MTLC: The Mathematics Technology Learning Center (MTLC) is a large classroom filled with computers where students can work on homework, receive one-on-one math tutoring, and retake tests to prove their mastery of the course content.

Successful Students:

- **Attend Class**
- **Study eBook, Take Notes, Watch Videos & Ask For Instructor Help**
- **Work through the Homework**
- **Come prepared for Tests**

LEARNING OUTCOMES: Upon completion of this course, students will be able to:

- Perform arithmetic operations with real numbers;
- Simplify linear, exponential, and polynomial expressions;
- Translate phrases into algebraic expressions
- Set up and solve application problems involving percent, geometry, mixtures and uniform motion
- Solve linear equations and inequalities in one variable;
- Solve systems of linear equations graphically and algebraically
- Graph linear equations and linear inequalities in two variables;
- Recognize and determine equations of lines.

COURSE STRUCTURE & EXPECTATIONS

COURSE DESIGN: M090 is broken into five Units, each of which includes Homework and a Mastery Test to support and demonstrate your mastery of the course content.

- **Pre-assessments:** Each Unit includes an optional Pre-Assessment. These may be taken at the beginning of a Unit to test your knowledge and potentially earn mastery points for concepts and skills you have already mastered. This will not affect your grade or clear your homework, but it may shorten your homework by allowing you to skip ahead to more advanced topics.
- **Homework:** The homework provides sets of practice problems and linked quizzes for each skill covered in the Unit. Completing practice problems will help you develop your understanding of each lesson and prepare for quizzes. **You do not need to do every single practice problem!** When you feel you are ready, take the quiz-me. You must pass the quiz-me with a 75% to master the objective. If you do not pass, ask for help, read an example again, or consult your notes. Then complete at least one additional practice problem to reload the quiz-me. **You do not need to do each practice problem again!**
- **Mastery Test:** The Unit Mastery Test is a traditional paper and pencil exam that will be proctored during regular course meetings. When circumstances prevent you from taking a test at the scheduled time, contact your instructor PRIOR to the time of the test to announce your absence. Absences are excused only for reasons of illness, injury, family emergency, or a University-sponsored activity. Arrangements for a make-up exam must occur within one week of the scheduled exam date. Failure to arrange a make-up exam within a week of the scheduled exam date will result in a score of zero for the exam. You are not allowed to use a cellphone or access other websites or apps during a Mastery Test. ***You may use a calculator and a single page of notes (8.5"x11").**
 - You may retake Mastery Tests to improve your score if you have completed at least 90% of the learning objectives for the unit AND either took the Mastery Test on time or had an excused make-up Mastery Test.

EXTRA CREDIT—MATH NOTEBOOK: Students in this course are encouraged to keep a notebook to record class notes, examples and practice work. This will help you organize your notes and practice work into a study guide and remember what you are learning. The notebook is also helpful for reviewing your work on problems, especially when you get stuck or have questions. Developing a well-organized approach to learning new concepts and skills will help you achieve mastery in mathematics as well as other subjects, which will make your entire college experience more rewarding. Your notebook will be checked by your instructor when you take the Unit Mastery Test. *Your Notebook is worth a bonus of up to 2% of your final grade.

The points for each notebook check will be given if the following conditions are met:

- Organization: Chapter sections and topics are clearly labeled
- Math Definitions and Illustrations: Vocabulary and drawings that explain the concepts
- Example Problems: Examples from the book, videos or instructor help
- Work problems: Shows work on practice problems from homework

EXTRA CREDIT—ATTENDANCE & PARTICIPATION: Regular attendance and participation are strongly encouraged in this course. *Your Attendance is worth a bonus of up to 3% of your final grade.

REASONABLE ACCOMMODATIONS: Students with disabilities may request reasonable course modifications. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). For more information, please consult <http://www.umt.edu/dss/>. Examples of reasonable accommodations include extra time or use of a quiet room for tests and/or quizzes. To qualify for reasonable accommodations you must provide a letter from DSS.

You are responsible for making the necessary arrangements with DSS at the Mountain Campus or the Missoula College campus. If you have any questions, please contact me.

CALCULATORS: A graphing calculator is required for M090; the Department of Applied Arts and Sciences recommends and uses Texas Instruments models TI-83 or TI-84 (regular or plus editions). Calculators with symbolic manipulation capabilities (e. g. TI-89, TI-92) will not be allowed in testing situations. A virtual TI-84 calculator is available on each of the MTLC computers and may be used during exams.

TUTORING: Math tutoring is available for all UM students. In addition to the tutoring provided at the MTLC (MC room 230), additional tutoring is available on both campuses. Check for hours at the Missoula College Learning Center (MC room 022; 243-7826; <http://mc.umt.edu/learning-center/Tutoring/default.php>), or for tutoring on the Mountain Campus see: <http://hs.umt.edu/math/undergraduate/all-students/free-tutoring.php>.

FINAL GRADES: Final grades will be computed using the following weights:

- Mastery Tests: 60%
- Homework 40%

Students must complete M090 with a RC or better to advance to their next math course.

Letter grades correspond to numerical scores (as shown in MyLabsPlus) according to this plan:

RF	RD	RC	RB	RA
Below 60%	60-69%	70-79%	80-89%	90-100%

GRADE OPTION: M090 can be taken for a traditional letter grade only. It cannot be audited or taken credit/no credit.

PETITION TO DROP: Petitions for dropping will be considered only for students who provide written verification of at least one university approved reason:

1. Error in registration
2. Family emergency
3. Accident or illness
4. Change in work schedule

Reasons that are not acceptable include:

1. Forgetting to turn in a drop slip
2. Protecting a student's GPA

INCOMPLETES: A grade of incomplete will only be considered when all three of the following are true:

1. The student has been in regular attendance and passing up to three weeks before the end of the academic semester.
2. Factors beyond the student's control make it impossible to complete the course on time.
3. The instructor and the student agree that there is a reasonable probability that the student will be able to make-up the work required to complete the course and specific arrangements are drawn up and signed by both. A student who receives an incomplete has one calendar year to resolve the incomplete (I) before it automatically reverts to a failing grade (RF).

ACADEMIC CONDUCT: All students are expected to practice academic honesty as defined by the Student Conduct Code, available at <http://www.umt.edu/student-affairs/dean-of-students/default.php>. Academic misconduct is subject to an academic penalty by the instructor and a disciplinary sanction by the university.

UNIVERSITY OF MONTANA ATTENDANCE POLICY: Students who are registered for a course but do not attend the first two class meetings may be required by the instructor to drop the course. This rule allows for early identification of class vacancies to permit other students to add classes. Students not allowed to remain must complete a drop form or drop the course on the internet (<http://cyberbear.umt.edu>) to avoid receiving a failing grade. Students who know they will be absent should contact the instructor in advance.

Students are expected to attend all class meetings and complete all assignments for courses in which they are enrolled. Instructors may excuse brief and occasional absences for reasons of illness, injury, family emergency, or participation in a University sponsored activity. (University sponsored activities include for example, field trips, ASUM service, music or drama performances, and intercollegiate athletics.) Instructors shall excuse absences for reasons of military service or mandatory public service.