Spring 1-2016

M 095.00: Intermediate Algebra

Unknown
University of Montana - Missoula

Instructor:
Email:
Office: **Math Technology Learning Center,**
Mansfield Library Level 1, Room 115

Text: *Intermediate Algebra*, 3ⁿᵈ Edition
Michael Sullivan III and Katherine R. Struve
Available as an e-book through MyLabsPlus

WELCOME TO INTERMEDIATE ALGEBRA! M095 is a one-semester course for students who have not yet mastered a second year of high school algebra, or for those who need a refresher course — particularly those students planning to take either M135, Mathematics for K-8 Teachers I, or M121, College Algebra. Every student intending to take calculus needs to be successful in M095. This course, M095 (Intermediate Algebra), builds on the fundamentals covered in M090 (Introductory Algebra). M095 does not substitute for any other mathematics requirement, nor does it fulfill the general education mathematics requirement.

PLACEMENT in M095 is based on your individual mathematics assessment (ALEKS Level 3) or completion of M090 (Introductory Algebra) with a grade a grade of RC- or better; the "R" designation indicates that the course is remedial or developmental. Developmental courses' credits do <u>not</u> count toward associate degrees or baccalaureate degrees, but the credits <u>do</u> 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 <u>immediately</u>.

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. Your willing participation is essential if you plan to succeed in this course. Come to class and come prepared. Please understand that it is impossible for any instructor to cover every example in class. You must do your part by reading the book on your own, watching the available videos and reading the notes given through mylabsplus. Don't fall behind! Success in math is all about doing the work and practicing. If you are struggling, get help! And do more math!

How do I access my course? You can find the MyLabsPlus icon at the top of the my.umt.edu page: http://my.umt.edu/.

MTLC: The Mathematics Technology Learning Center (MTLC) is a large classroom filled with computers and an opportunity for one-on-one math instruction. There are 48 computer workstations, experienced faculty members and staff and a private workroom for small group instruction. Students will meet in the lab, as well as a classroom, to learn and prove their mastery of mathematics ensuring that they can successfully move on to and complete credited college math courses.

M095 is broken into seven chapters which include a pre-test, study guide questions and a test to prove your mastery on that chapter's concepts. You will take a pre-test at the start of a chapter to assess your understanding.

If you do not achieve an 80% or better on the pre-test we will work together, using an adaptive study plan in MyLabPlus, one-on-one help, and small group instruction to prepare you for the mastery exam until you are able to earn an 80% on the pre-test. Your book is also an excellent source for explanation, examples and definitions. Read through each section and practice the problems given in examples to gain further understanding of the material.

When you pass the pre-test for a specific module at 80% or better, you will be considered ready to take the mastery exam. You need to then take the exam and pass at a 75% or better to have mastered the material and you will not need to do any more work in that module.

NOTEBOOK: For the study plan work we will ask that you keep a notebook of your written work. The notebook will help us to answer questions you may have as well as assisting you in organizing your mathematics. A well-organized approach to mastering mathematical concepts that are unfamiliar to you is the best approach. It will also help you develop good study habits that will make your entire college experience more rewarding. Your notebook will be work 10% of your final grade in the course, and will be checked by an instructor before you take each mastery test.

The 10 points given for notebook check will be distributed in the following way:
- Present: 2 points, Student has a notebook in class.
- Organized: 2 points, Chapter and sections are labeled
- Math Definitions and Illustrations: 2 points, Vocabulary and drawings that explain the concepts
- Example Problems: 2 points, from the book, videos or instructor help
- Work problems: 2 Points: Study plan, Pre-test

PARTICIPATION: Five hours of lab/classroom time are required each week and 10% of your grade in each chapter depends on your participation. Student participation is essential for success in this course and the time requirements insure that the minimum time requirement is being met in an environment where knowledgeable help is available. There is a wide-range of instructor hours. Please see the schedule in mylabsplus.

You will be given a weekly grade for Attendance. Five points will be given for the Wednesday regular class session, and five points will be given based on the number of hours you spend in the MTLC.

Hours	Points
4	5
3.5	4
3	3
2	2
1	1

University of Montana policy states: 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.

OPPORTUNITY FOR EARLY COMPLETION AND ADVANCEMENT: One of the major benefits of the MTLC is the ability for students to work at their own pace. If you needed a brief math refresher, you may find that you will be able to move through the material at an accelerated pace. Or, you may decide to dedicate more time to math, and will find that dedication translates to an early finish. If you are able to move through the mastery exams for M095 in the first two weeks of class, please see your instructor immediately. You may be eligible to move into M121.

CALCULATOR: 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. There will be a TI-84 available on your computer screen in the MTLC.

LEARNING GOALS:
1. To solve linear equations and inequalities in one variable
2. To graph linear equations and inequalities in one and two variables
3. To operate with polynomial expressions, solve integer factorable polynomial equations
4. To operate with integer and rational exponents
5. To operate with complex numbers
6. To solve quadratic equations that are not integer factorable
7. To understand and use functions
8. To graph quadratic equations, find vertices of quadratic functions
9. To model application problems using the skills listed above
10. To apply calculator technology as an aid to problem solving in algebra

FINAL GRADES:
The MTLC approach to learning mathematics is based on the concept of mastery. Since we have set the base level for mastery at 75% for each chapter's mastery test, the final grades will be based primarily on your scores on the mastery test. In a traditional algebra course there are often a fair amount of points given for homework and quizzes. In this course the homework and quizzes are replaced by study plans designed to help you achieve appropriate scores on the mastery tests. For this reason the study plans will have a lower point value than you may have encountered in previous math courses. The real goal is to master the material!
The final grade will be computed using the following weights:
- Mastery Tests: 70%
- Pre-Tests   10%
- Notebook   10%
- Attendance/Participation: 10%

Students must complete M095 with a RC or better to advance to their next mathematics 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:
M095 can be taken for a traditional letter grade only. M090 cannot be audited or taken credit/no credit.

TUTORING: Math tutoring is available for all UM students. Check for hours of the Learning Center at the Missoula College campus (AD 06; 243-7826; two days' notice required for scheduling tests) and at math@Mansfield on the Mountain Campus: http://www. umt. edu/math/MLC/default. htm. There will also be instructors and tutors available in the Math Technology Learning Center (MTLC), located in the basement of the Mansfield Library, room 115.

REASONABLE ACCOMMODATIONS: Students with disabilities may request reasonable modifications. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). "Reasonable" means the University permits no fundamental alterations of academic standards or retroactive modifications. 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 (for the Mountain Campus) or the ASC (for the Missoula College campus). If you have any questions, please contact me.

EXTRA CREDIT: There is no extra credit available for this course.

PETITION TO DROP: Petitions for dropping will be considered only for students who provide written verification of at least one university approved excuse:
1. Error in registration
2. Family emergency
3. Accident or illness
4. Change in work schedule

Reasons that are not satisfactory 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).

IMPORTANT DATES:
http://www.umt.edu/registrar/PDF/Spring2016officialdatesdeadlines.pdf