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M 095.06: Intermediate Algebra

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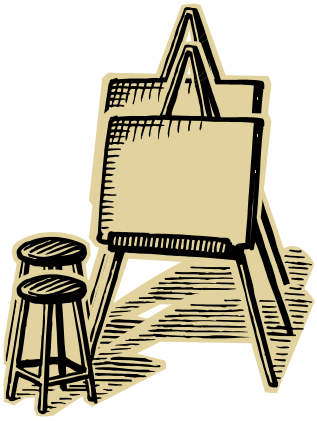
UNIVERSITY OF MONTANA

M095 Section 06 Intermediate Algebra

Department of Applied Arts and Sciences
Spring 2015 Syllabus



Instructor: Jeff Arends
Office: Corbin 264
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Course Coordinator: Steve Phillips
Department of Applied Arts and Sciences
steven.phillips@umontana. edu
Office: GH 07, the "Math Shack," Missoula College East Campus

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

Online Materials: Access MyLabsPlus at my.umt.edu; login using NetID/password

I am always doing that which I cannot do, in order that I may learn how to do it. ~ PABLO PICASSO

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 of RC- or better; the "R" designation indicates that the course is remedial or developmental. Developmental courses' credits do not count toward associate degrees or baccalaureate degrees, but the 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. Your willing participation is essential if you plan to succeed in this course. Let's have a motivated, friendly, and enthusiastic class.

KEY TO SUCCESS: It is impossible to stress strongly enough how important it is for you to be diligent in your study habits. Pay attention and cultivate a positive attitude! No matter how you feel about studying math, personal responsibility and a solid work ethic are great attributes to be able to claim as your own. You are an important part of this class — you can make it lively and interesting or silent and boring. Develop a positive working relationship with your classmates and instructor. If you keep up with the work, the subject makes sense and the challenges are manageable

COURSE DESCRIPTION: M 095 - Intermediate Algebra. Offered autumn and spring. Prerequisite - M 090 (MAT 005D) RC- or better or ALEKS placement at least 3. Topics include linear equations, inequalities, applications and graphing; polynomials; radicals, rational exponents and complex numbers; quadratic equations. A graphing calculator is required for this course. Credit does not count toward Associate of Arts or Baccalaureate degrees. (From CyberBear)

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

CLASS ATTENDANCE: Attendance is not part of your final grade in M095, but no one can teach you if you are not in class engaged and ready to learn. Come to class prepared. Do your homework regularly. You will be more successful if you study every day. **Important information may be shared during any class time that may not be posted on MyLabsPlus**.

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.

CALCULATOR: A graphing calculator is required for M095; 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.

MYLABSPLUS (MLP): MyLabsPlus is an innovative way for you to do homework and take quizzes with immediate feedback. Every section of the M095 text covered in class has a corresponding assignment in MyLabsPlus. Homework can be submitted up to four times until the unit closes. Note that assignments are open for specific times and in a specific order. Check the MyLabsPlus calendar frequently to be sure you are keeping current with your assignments. You must keep up with the progression in order to succeed in this course. Late assignments will not be reopened without a compelling reason. You can find the MyLabsPlus icon at the top of http://my.umt.edu/.

TESTS: Five tests will be given in class. The scheduled dates are shown on the Course Outline and are *not* flexible. Please understand that it is disrespectful and counterproductive for non-DSS students to expect personalized test times, although instructors are all very much aware that people have lives and unexpected events do occur. If arrangements for making up a test have not been made within a week, the test grade is automatically set to ZERO.

You are allowed to use a calculator and one 8½"x11" page of notes (front and back). **You are not permitted to use a cell phone**. Corrected tests will be returned within one week after the test date. If you have questions regarding the grading of your test, please wait until after class to discuss it.

FINAL EXAM: The final exam for this class will be given in class during finals week and is worth 150 points.
The final exam is optional for any student who has an A in the course on the last day of classes.
See the UM Finals Week schedule for the date and time. (http://www.umt.edu/registrar/PDF/finalSpr15.pdf)

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) and at math@Mansfield on the Mountain Campus.

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/disability. 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 Learning Center (for the Missoula College campus). If you have any questions, please contact me.

ACADEMIC CONDUCT: All students must practice academic honesty as defined by the Student Conduct Code, available at http://www.umt.edu/vpsa/policies/student_conduct.php. Academic misconduct is subject to an academic penalty by the instructor and a disciplinary sanction by the university.

GRADING POLICIES: M095 can be taken for a traditional letter grade only. M095 cannot be audited or taken credit/no credit. The final grade will be computed as follows:

MyLabsPlus homework:	440 points (44 @ 10 points each)
MyLabsPlus quizzes:	160 points (8 @ 20 points each)
In-class tests:	500 points (5 @ 100 points each)
Final exam:	150 points
TOTAL	1250 points

Letter grades correspond to numerical scores according to this plan:

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

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. Accident or illness
3. Family emergency
4. Change in work schedule

Reasons that are not satisfactory include:

1. Forgetting to turn in a drop slip
2. Protecting a student's grade point average

See Important Dates below for more information.

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 (F).

IMPORTANT DATES

Class Day 7:

- ✓ Last day for students to Add classes via CyberBear without consent.

Class Day 15:

- ✓ Last day to register for classes, add classes with override slip/electronic override, change credits in variable credit courses, or drop classes with a refund on CyberBear or with override slip/electronic override.
- ✓ Last day to withdraw from the semester (drop all courses) with a partial refund.
- ✓ Last day to change grading option to or from audit.
- ✓ Last day to Buy or Refuse health insurance coverage or add clinical health fee.

Class Day 16 – Class Day 45:

- ✓ Spring Semester course changes require a drop/add form with Advisor and Instructor signatures.
- ✓ Students can add or drop courses or change grading options, except audit. $10 fees will be assessed per drop and per add.
- ✓ A 'W' will appear on the transcript.

Class Day 46 – Last Day of Classes:

- ✓ Spring Semester course changes require a petition form available at Griz Central Registration Counter with Advisor, Instructor and Dean Signatures.
- ✓ Students can add or drop courses or change grading options, except audit. $10 fees will be assessed per drop and per add.
- ✓ A 'WP' or 'WF' will appear on the transcript.

Last Monday of Classes:

Last day to withdraw from the semester (Dropping all Spring courses) by 5:00 p.m.

After the Last Monday of Classes:

If withdrawing from Spring Semester courses, a petition to retroactively withdraw will be required and students must obtain the appropriate signatures.

Important Dates and Deadlines is found at http://www.umt.edu/registrar/calendar.aspx

ADDITIONAL INFORMATION & RESOURCES:

Academic calendar available at http://www.umt.edu/provost/about/academiccalendar.aspx
Finals schedule available at http://www.umt.edu/registrar/PDF/finalSpr15.pdf
Office for Student Success (math placement)
http://www.umt.edu/oss/for_students/mathplacement/default.php

Some other useful websites:

Khan Academy	http://www.khanacademy.org/
Purplemath.com	http://www.purplemath.com/
Algebasics	http://algebasics.com/
MathBits: Using TI calculator	http://mathbits.com/MathBits/TISection/Openpage.htm#General
Another great TI 83/84 help site	http://www. prenhall. com/divisions/esm/app/graphing/ti83/
Calculator help for other models	http://www. prenhall. com/divisions/esm/app/calc_v2/
Free graph paper generator	http://incompetech. com/graphpaper/
Coping with Math Anxiety	http://www.mathacademy.com/pr/minitext/anxiety/
Math.com Anxiety Study Tips	http://www.math.com/students/advice/anxiety.html

M095 SPRING 2015 COURSE OUTLINE:

Jan 26 Intro to M095, §R.1	Jan 28 §R.2, R.3	Jan 30 §R.4, R.5
Feb 2 §1.1, 1.2	Feb 4 §1.3, 1.4	Feb 6 §1.5, 1.6
Feb 9 §1.7, 1.8	Feb 11 Review	★ Feb 13 ★ Chapter R & 1 Test
☺ Feb 16 ☺ Washington-Lincoln Day Holiday	Feb 18 §2.1, 2.2	Feb 20 §2.3, 2.4
Feb 23 §2.5	Feb 25 §2.6	Feb 27 Review
★ Mar 2 ★ Chapter 2 Test	Mar 4 §4.GR, 4.1	Mar 6 §4.2, 4.3
Mar 19 §4.4, 4.5	Mar 11 §4.6, 4.7	Mar 13 §4.8
Mar 16 Review	Mar 18 Chapter 4 Test	Mar 20 §5.GR, 5.1
Mar 23 §5.2	Mar 25 §6.GR, 6.1	Mar 27 §6.2
☺ Mar 30 – Apr 3 ☺ Spring Vacation		
Apr 6 §6.3	Apr 8 §6.4	Apr 10 §6.5
Apr 13 Review	★ Apr 15 ★ Chapter 5 & 6.GR-6.5 Test	Apr 17 §6.6
Apr 20 §6.7	Apr 22 §6.8	Apr 24 §7.1
Apr 27 §7.2	Apr 29 §7.3	May 1 §7.4
May 4 Review	★ May 6 ★ Chapter 6.6 – 6.8 & 7 Test	May 8 Review
✍ Final Exam Friday, May 15 from 10:10 – 12:10 in the normal classroom.		

See the MyLabsPlus calendar to find the opening and closing dates for MyLabsPlus tests, quizzes and homework.

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