

MAT 099 – Intermediate Algebra Course Syllabus
Tuesday, Thursday (08:00 – 08:50) / Walters 256
Fall 2009

COURSE DESIGNATION

MAT 099, Intermediate Algebra. MAT 099 serves as the prerequisite to MAT 103 or MAT 104 for students who do not have two years credit of high school algebra. The Mississippi Board of State Institutions of Higher Learning (IHL) requires that all entering freshmen with an ACT math subscore of 16 or below take MAT 099 during their first semester of enrollment at an IHL university. Students are required to maintain continuous enrollment in MAT 099 until a passing grade is obtained. Additionally, students required to take MAT 099 will not be allowed to withdraw from the class, nor will they be allowed to enroll in any additional math courses until a passing grade has been earned in the MAT 099. This course does not satisfy any degree requirements; however, *a failing grade in MAT 099* will be included when computing the student's GPA with regards to full-time status, academic and financial aid, probation or suspension. Any student receiving an F in MAT 099 will automatically be registered for MAT 099 for the next regular term of classes. If a student who has preregistered for MAT 103 or MAT 104 and fails MAT 099, the student will be dropped from the class roll of the upper level math and reinstated in MAT 099.

TEXT

D. Franklin Wright, Intermediate Algebra. Fifth Edition. Hawkes Publishing 2004.

INSTRUCTOR

Mack Smith Email: msmith@deltastate.edu Office: Walters 270-G Phone: 846-4517

General Course Objectives

Upon completion of the course, the student will be able to:

1. Find the sum, difference, product, and quotient of any two real numbers.
2. Evaluate, simplify and perform operations with algebraic expressions.
3. Solve linear, quadratic and miscellaneous equations and their applications.
4. Solve linear inequalities.
5. Factor and perform operations with polynomials.
6. Simplify radical expressions and solve equations involving radicals.
7. Find the slope and equations of lines and sketch their graphs.

TUTORING SERVICE

Free tutoring will be available in the Mathematics Department for students who need help outside of class. Hours when tutors are available will be given to the students and posted on the door of the tutor room, Walters 278.

Help is also available in the Academic Support Lab, room 311 of the H. L. Nowell Union Building from 11:00 am to 5:00 p.m. daily. There are 10 computers with headphones to accommodate the Hawkes Learning Systems software program. See or call Diane Blansett, director, at 846-4654.

CLASS ATTENDANCE

Prompt and regular attendance is necessary for success in this course. To receive credit in this course, you must attend a minimum number of the class meetings. Classes meeting three times per week will be allowed a total of 6 absences, excused and unexcused. If you **exceed the allowable number** of absences, **a grade of "F"** will be assigned as the final grade in the course. **To be counted present, you must arrive on time for the class and remain in class the entire time.** When you are tardy for class, it is your responsibility to request that I change the recorded absence to a tardy. This must be done on the day the tardy occurs. **A maximum of 3 tardies will be allowed** without consequences. **Each additional tardy will be recorded as an unexcused absence. Each student must spend an hour in the computer lab each week as part of this course.**

The **comprehensive Final Exam** for this course is scheduled for **December 7, 2009** at **12:00 noon**. You must take the final exam to pass this class.

OFFICE HOURS

Monday	Tuesday	Wednesday	Thursday	Friday
07:30 – 08:00	07:30 – 08:00	07:30 – 08:00	07:30 – 08:00	07:30 – 08:00
09:00 – 10:00	09:30 – 10:45	09:00 – 10:00	09:30 – 10:45	09:00 – 10:00
11:00 – 12:00		11:00 – 12:00		11:00 – 12:00

Other Times by Appointment

GRADING AND EVALUATION

1. Unannounced quizzes may be given throughout the semester (based on homework assignments).
2. Homework will count as 20% of your final grade. Homework (to be done on the computer using Hawkes Learning Systems software) must be done by the due date to get full credit.
Late homework penalties will be assessed as follows:
 - 10% for homework 1 days late;
 - 20% for homework 2-3 days late;
 - 50% for homework 4-7 days late;
 - 100% for homework more than 7 days late.
3. **Four scheduled tests** will be given during the semester.

Your **final grade** will be the **average of: the homework grade; the 3 best scheduled test grades; and the final exam** (all equally weighted). **Credit for computer lab attendance will be included in the homework grade.**

There will be No Extra Credit or “make-up” work to improve your grade.

Grades will be assigned according to the following scale:

A (93 – 100) B (85 – 92) C (77 – 84) D (70 – 76) F (Below 70)

Cheating and plagiarism are not tolerated. If it is established that a violation has occurred, the instructor may determine the penalty, or he/she may report the offense to the department chair and dean of the school. The usual penalty involves a grade of zero on the test, examination or paper in question.

CLASSROOM POLICIES AND MAKE-UP TESTS

1. **Do NOT** go to **SLEEP** in this **CLASS!!!**
2. Do not use tobacco or eat in the classroom.
3. **Do come to class on time** and be prepared to begin class at the scheduled time.
4. Do not ask to leave class early. Schedule all appointments at times that do not conflict with class time.
5. Cell Phones and Pagers must be turned off during class. Cell Phones may not be used as calculators.
6. Calculator use is permitted during all classes and tests.
7. Scheduled tests will be announced at least a week prior to the actual test date.
8. Be sure to **show all work on tests**. No partial credit will be given if the work is not shown in detail.
“Answers only” will not be accepted.
9. Come to my office for help during scheduled office hours. No appointment is necessary. It is extremely important that you understand the material and are able to complete the homework assignments for each class prior to the next class. Tutoring is also available in Walters 278.
10. You must expect to practice assigned problems until you understand them.
11. Make-up tests will be given only to those students presenting a written excuse, acceptable by the university. Any absence from scheduled work must be covered by a written excuse by the Vice President for Academic Affairs, the Student Health Service, or a doctor before the student is allowed to make up that work. **All make-up must be completed within three days of the originally scheduled test.**
12. Buy a scientific calculator or graphing calculator early in the semester and learn how to use it. Do not expect me to know how to use your calculator without the manual. Please do not ask to borrow a calculator from me or one of your classmates on test day since rarely do two calculators operate exactly the same. **BRING YOUR CALCULATOR TO CLASS EVERY DAY.**

IMPORTANT DATES

August 25, 2009 is the last day that a course may be added to your schedule; this includes changes from one section to another within the same course. If you plan to **audit** this course, you must make the change by **August 28, 2009**. Students who remain in the course **after August 31, 2009**, and who elect to drop the course will receive a grade of **W if passing or F if failing** the course at the time of the drop. The withdrawal process is not complete until the drop slip has been signed by all designated parties and the completed form has been turned in to the Registrar’s office. **The last day to drop a class is December 4, 2009.**

The **comprehensive Final Exam** for this course is scheduled for **December 7, 2009 at 12:00 noon**. You must take the exam on the day it is given.

Labor Day Holiday
Fall Break
Thanksgiving Holidays

September 7, 2009
October 15–16, 2009
November 23–27, 2009

Practice Problems for MAT 099 Intermediate Algebra

Section 1.1 (Properties of Real Numbers)

p. 14: #'s 1-11 odd, 27-33 odd, 63-65, 69

Section 1.2 (Operations with Real Numbers)

p. 29: #'s 1, 3, 5, 7, 9-13, 17-19, 21, 22, 23, 25, 29, 30, 31, 33, 41, 45, 46, 48-50, 57, 59, 67, 69, 71, 73, 75, 77

Section 1.3 (First-Degree/Linear Equations and Absolute Value Equations)

p. 41: #'s 1-35 odd, 41, 43, 49, 51

Section 1.4 (Evaluating and Solving Formulas)

p. 48: #'s 1-15 odd, 26, 30

Section 1.5 (Applications)

p. 58: #'s 1, 3, 7, 9, 11, 16, 41

Section 1.6 (Linear Inequalities and Absolute Value Inequalities)

p. 73: #'s 1, 3, 5, 7, 13, 15, 21, 23, 31, 33, 46, 47, 48, 51a

Section 1.7 (Properties of Exponents)

p. 82: #'s 1-13 odd, 17, 19, 24, 26, 29, 33-41 odd, 49, 53, 69

Section 1.8 (More on Exponents and Scientific Notation)

p. 91: #'s 1-7 odd, 8, 9, 15, 17, 20, 21

Section 2.1 (Cartesian Coordinate System and Straight Lines: $Ax + By = C$)

p. 110: #'s 1, 5, 9, 17, 35-38. 17-22 => Find the intercepts and graph only.

Section 2.2 (Slope-intercept Form: $y = mx + b$)

p. 121: #'s 1, 2, 4, 6, 9, 13, 17-19, 21, 25, 27, 43, 44, 48, 49-51

Section 2.3 (Point-slope Form: $y - y_1 = m(x - x_1)$)

p. 135: #'s 1-7 odd, 8, 17, 19, 21, 23, 24-36 even, 48-51

Section 2.4 (Introduction to Functions)

p. 153: #'s 1, 3, 5, 9, 15, 17, 18, 20, 21, 23, 24, 31-34

Section 4.1 (Addition and Subtraction of Polynomials)

p. 259: #'s 1, 3, 13-23 odd, 27, 31, 37, 38, 41

Section 4.2 (Multiplication of Polynomials)

p. 268: #'s 1-13 odd, 17-29 odd, 49, 52, 63

Section 4.3 (Division with Polynomials and Synthetic Division)

p. 279: #'s 1, 3, 7, 11

Section 4.4 (Introduction to Factoring)

p. 292: #'s 1, 3, 5, 9, 11-21 odd, 24, 25, 27, 28, 41, 44

Section 4.5 (Introduction to Factoring)

p. 299: #'s 1, 3, 6-9, 11, 14, 17, 33-39 odd

Section 4.6 (Polynomial Equations and Applications)

p. 311: #'s 1, 3, 7, 11, 14, 15, 17-29 odd, 53-55, 59, 60

Section 5.1 (Multiplication and Division of Rational Expressions)

p. 338: #'s 11-19, 24, 26, 35, 37, 44

Section 5.2 (Adding and Subtracting of Rational Expressions)

p. 348: #'s 1, 3, 8, 15

Section 5.4 (Equations and Inequalities with Rational Expressions)

p. 348: #'s 1, 3, 5, 7, 21

Section 6.1 (Roots Radicals and Complex Numbers)

p. 410: #'s 11, 12, 16, 21

Section 6.3 (Arithmetic with Radicals)

p. 429: #'s 1, 3, 4, 7, 9, 16, 11, 22

Section 7.1 (Quadratic Equations: Completing the Square)

p. 476: #'s 1, 3, 5, 9-19 odd, 27, 29, 33, 35, 37, 40, 41

Section 7.2 (Quadratic Equations: The Quadratic Formula)

p. 484: #'s 2, 4, 6, 8, 25, 27, 28, 29, 31, 33, 41, 43-45, 52

Section 8.1 (Quadratic Functions: Parabolas)

p. 527: #'s 1, 2, 9, 13, 16, 25 - 28, 31, 33, 35