

UNIVERSITY OF ARKANSAS AT MONTICELLO
SCHOOL OF MATHEMATICAL AND NATURAL SCIENCES
COURSE SYLLABUS
Fall 2011, MWF 12:10

Instructor: Victoria Ryburn **e-mail:** ryburn@uamont.edu **Phone:** 870 - 460 - 1716

Office: Science Center C15 **Office Hours:** MWF 9:10 – 10:30, TH 9:40 – 10:30,
M – F 2:10 – 3:30, or by appointment

Course: MATH 1043, College Algebra, 3credit hours

Note: This course fulfills specific general education requirements.

Required Text and Material: College Algebra, 3rd Edition, by Barnett, Ziegler, Byleen, and Sobacki (Publisher: McGraw-Hill). A graphing calculator is required. Recommended models are TI-83 or TI-84. Other brands are acceptable, but faculty and tutors may not be able to assist students with these calculators.

Additional Resources: An optional ALEKS course has been created for all College Algebra students at UAM. Many students have benefitted from ALEKS in Intermediate Algebra so it is recommended that students take advantage of this resource. The course code for this course is **AMMNM-XQKQQ**. Also free tutoring will be available in the Science Center computer lab A23.

Course Prerequisite: An ACT Mathematics score of 19 or higher, or a grade of C or better in MATH 0183 (Intermediate Algebra).

Course Objectives: This course is a terminal course for the General Education program and preparatory course for other mathematics courses. The course has the dual focus of presenting the necessary algebraic material as well as nurturing problem solving skills.

Learning Outcomes: By the end of this course, you should be able to:

1. Determine if an equation, graph or set of ordered pairs represents a function.
2. Find the domain of a function.
3. Sketch the graph of a function.
4. Determine if a function is one-to-one and if so, find its inverse.
5. Understand and apply the properties of polynomial and rational functions.
6. Solve polynomial inequalities.
7. Solve problems involving direct, inverse, and joint variation.
8. Understand and apply the properties of exponential and logarithmic functions.
9. Solve exponential and logarithmic equations.
10. Solve a system of linear equations using the methods of substitution, elimination by addition, Gaussian elimination, and matrix equations.
11. Perform arithmetic operations with matrices.
12. Use the Binomial Theorem to find the coefficients of terms in a binomial expansion.

Course Content and Outline: The following dates are tentative and will be revised as necessary.

Chapter	Topic	Exam Dates
1.2 – 1.6	Functions and Graphs	Monday, September 19
2.3, 3.1, 3.3, 3.5, 3.6	Polynomial and Rational Functions, Variation	Monday, October 10
4.1 – 4.5	Exponential and Logarithmic Functions	Monday, November 7
5.1, 6.1, 5.3, 5.4, 6.2, 6.4, 6.7, 7.6	Systems of Linear Equations and Inequalities, Matrices, Binomial Theorem	Wednesday, December 7
Final Exam	Comprehensive	Monday, December 12

Grading: There are two components to your grade: quizzes/homework and tests (including the final examination). Tests are announced in advance and cover those topics presented in the text and lecture. The final exam is comprehensive. The course grade is determined as follows:

Quizzes/homework – 16.67% Tests – 83.33%

Grades are assigned on the following basis:

A 90 – 100% B 80 – 89% C 70 – 79% D 60 – 69% F 0 – 59%

Special Policies:

1. If your grade on the final exam is less than 40%, then your grade for the course will be F. If your grade on the final exam is between 40% and 50%, then your maximum grade is D. This policy supersedes your other grades in the course.
2. There are no makeup quizzes or exams. (Note: The only exception to this policy will be absences due to a UAM sponsored event. In this case, any makeup work must be arranged in advance.)
3. The three lowest quiz/homework scores will be dropped.
4. If a test is missed, the final exam percentage score will replace the missed test score. If more than one test is missed, the final exam score will replace the first missed test score, and all subsequent missed tests will be assigned a score of zero. If no tests are missed, the final exam score, if higher, will replace the lowest test score.
5. The use of cell phones in class is prohibited. All cell phones are expected to be turned off before class begins. Any use of a cell phone during an exam or a quiz will be considered cheating and will be dealt with accordingly. Frequent disruptions of class by a student's cell phone will result in that student being withdrawn from the course, possibly with a grade of F.
6. Class attendance is critical to the success of the student. Any student who misses more than six consecutive class meetings without a valid and well-documented reason will be considered to have stopped attending class. A last date of attendance will be posted for the student in the WeevilNet system, and unless the student withdraws from the course by the drop date, his/her grade for the course will be F.

Expectations of the Student: While this course is not particularly difficult for those who make a commitment to work on the course, it does require a commitment of time and energy. The pace of the course is fairly rapid and it is necessary for you to not only attend every class meeting, but also to seriously attempt the homework, review recent lectures and preview material to be discussed in the next lecture. You should allot at least two hours of study time for each hour of lecture. Normally you will need this time to complete your homework assignments. It is important that you work every homework assignment. While doing your homework you should focus on understanding the basic principles presented rather than simply mimicking procedures.

Important Dates:

Wednesday, August 24	First day of classes
Tuesday, August 30	Last day to register or add classes
Monday, September 5	Labor Day Holiday
Friday, October 7	Deadline to apply for May graduation
Wednesday, November 9	Last day to drop a class with W
November 7 - 18	Preregistration for Spring, 2012
November 23 – 25	Thanksgiving Holiday
Tuesday, December 6	Last day to withdraw from class
Friday, December 9	Last day of classes
December 12 - 16	Final exam period
Monday, December 12, 8:00 – 10:00	Final Exam

Students with Disabilities: It is the policy of the University of Arkansas at Monticello to accommodate individuals with disabilities pursuant to federal law and the University's commitment to equal educational opportunities. It is the responsibility of the student to inform the instructor of any necessary accommodations at the beginning of the course. Any student requiring accommodations should contact the Office of Special Student Services located in Room 120 of Harris Hall, phone 870-460-1026, TDD 870-460-1626, fax 870-460-1926.

Student Conduct: Students at the University of Arkansas at Monticello are expected to conduct themselves appropriately, keeping in mind that they are subject to the laws of the community and standards of society. The student must not conduct him/herself in a manner that disrupts the academic community or breaches the freedom of other students to progress academically.

Academic Dishonesty: For any instance of academic dishonesty that is discovered by the instructor, the student(s) involved will receive a grade of "0" for that assignment. Also, the incident will be reported to the Office of Academic Affairs for further possible actions. Academic dishonesty includes:

1. Cheating: Students shall not give, receive, offer, or solicit information on examinations, quizzes, etc. This includes but is not limited to the following classes of dishonesty:
 - a. Copying from another student's paper;
 - b. Use during the examination of prepared materials, notes, or texts other than those specifically permitted by the instructor;
 - c. Collaboration with another student during the examination;
 - d. Buying, selling, stealing, soliciting, or transmitting an examination or any material purported to be the unreleased contents of coming examinations or the use of any such material;
 - e. Substituting for another person during an examination or allowing such substitutions for oneself.
2. Collusion: Collusion is defined as obtaining from another party, without specific approval in advance by the instructor, assistance in the production of work offered for credit to the extent that the work reflects the ideas of the party consulted rather than those of the person whose name is on the work submitted.
3. Duplicity: Duplicity is defined as offering for credit identical or substantially unchanged work in two or more courses, without specific advanced approval of the instructors involved.
4. Plagiarism: Plagiarism is defined as adopting and reproducing as one's own, to appropriate to one's use, and to incorporate in one's own work without acknowledgement the ideas or passages from the writings or works of others.