Syllabus: MATH-1112 - MATH-1112-10 Fall 2011

Section Information: MATH-1112-10 Fall 2011

Course Name	MATH-1112
Course Description	College Algebra

Textbook

TEXT: Sullivan : Algebra and Trigonometry, 5th edition. Upper Saddle River, NJ, Prentice -Hall.
CD: WvEB Algebra, Pyzdrowski available through your school

Course Evaluation

Multiple forms of assessment will be used to measure your understanding of algebraic concepts and problem solving.
The point distribution of these assessments is:
A: 900 points or more
B: 800-899 points
C: 700 - 799 points
D: 600 - 699 points
F: 0 -599 points

Course Schedule

Find schedule under "Course Information" on the home page.

Help

On an average, you should expect to study two hours outside of class for each one hour in class. If you are spending more, then you may need to seek help! There are several excellent sources for such help. First, seek help from your classmates; use the WEBCT discussion group to get help or set up a study group. Often classmates can explain the problem clearly since they have been working on it. You may also seek assistance from your facilitator.

Homework

See homework under "Course Information" on the home page.

Contact information

E-mail: Susan.Goodwin@fairmontstate.edu
Phone: 367-4307
Office: 421 ET

[Institutional Syllabus Statements](#)

Multiple forms of assessment will be used to measure your understanding of algebraic concepts and problem solving. The point distribution of these assessments is:

EXAMS: There will be four tests given throughout the semester, each is worth 100 points. All exams are individual assessments and are to be proctored. They are closed book and closed note. No formula sheets, computer screens other than the test, or notes (paper, nor calculator) are permitted. (400 possible points)

COMPREHENSIVE FINAL: There will be a comprehensive final worth 200 points given no later than December 13, 2011. (200 possible points)

LABORATORY ASSIGNMENTS: There will be 8 computer laboratory assignments. The laboratory scores will be averaged. You will be awarded laboratory points that are 2 times your laboratory average. **Lab reports must be in a student's own words.** Laboratory assignments should be done with a partner. Some points are awarded for the ability to communicate about mathematics. Any laboratories not submitted as a team effort, will not be awarded communication points. (200 possible points)
You must work with a laboratory partner in your school to receive full participation points on the lab. Late labs will have a 10% deduction for each week that it is late after the test on which the lab appears.

QUIZZES: There will be 6 online homework quizzes and 2 ACT quizzes. The online homework quizzes are immediately graded and will be averaged for a possible 100 points. Homework Quizzes are open book and open notes, but must be done without help of your high school teacher-facilitator. You may attempt each HQ up to three times. You must complete at least one of each HQ before the test which includes the HQ sections. The HQ portion of the course will be "turned off" by 5:00 pm server time, December 11, 2011. Each ACT Quiz can allow you to earn bonus course points: between 1 number and 21 correct, earn 1 bonus point; 22 to 28 correct, earn 2 bonus points; 29 to 31 correct, earn 3 bonus points; 32 to 34 correct, earn 4 bonus points; 35 to 39 correct, earn 5 bonus points; 40 to 41 correct, earn 6 bonus points; 42 to 44 correct, earn 7 bonus points; 45 to 47 correct, earn 8 bonus points; 48 to, 49 correct , earn 9 bonus points; 50 to 60 correct, earn 10 bonus points; (120 possible points) One quiz should

be taken at the beginning of the course. The second ACT quiz should be taken the day after the final.

PARTICIPATION: You will be awarded up to 100 participation points for the course. Each individual course facilitator will determine how these points are awarded for any combination of points from attendance, homework, portfolio, notebook, or other school requirement. (100 possible points)

Objectives

- CONCEPTUAL UNDERSTANDING: rather than just rote memorization of algorithms
- MULTIPLE APPROACHES: to examine problems from analytical, geometric and numeric perspectives, to make judgements about the appropriateness of the choice of formal or approximate methods of solution
- TECHNOLOGY AS A TOOL: use technology as an integral part of the process of formulation, solution, and communication, to gain experience in selecting the proper tool for a given problem
- ACTIVE STUDENT LEARNING: to engage in the exploration and discovery of concepts and to learn to work cooperatively to solve problems
- COMMUNICATION OF IDEAS: to demonstrate understanding by explaining in written or oral form the meanings and applications of concepts
- PROBLEM SOLVING: gain experience as a problem solver, to analyze problems in an organized manner
- APPLICATIONS: use mathematics to model and solve problems
- HISTORY OF MATHEMATICS: to learn about mathematics as a human endeavor.

The specific goals of this course will be to stress an algebraic, graphical, and numerical approach to the study of:
- understanding and using the concept of function
- mathematical application problems
- solving equations and inequalities in one variable using multiple representations
- graphing equations and functions
- lines, parabolas, and circles
- higher order polynomial, rational, radical, absolute value, exponential and logarithmic functions
- systems of equations and matrices

To accomplish course goals, the class incorporates interactive laboratories which use technology and student activities that emphasize writing and student collaboration. Students will work in pairs or triads on the laboratories in order to develop mathematical communication skills. The development of your communication skills is an integral part of the course.

Section Instructor: Susan Goodwin

E-mail   Susan.Goodwin@fairmontstate.edu