WvEB College Algebra: Fall 2011
Math 103 - 3 credits
FINAL EXAM: **Wednesday, December 14**

INSTRUCTOR: Ms. Cecilia Fizer	OFFICE: Science Building, Room 108 Concord University
PHONE: 304-384-6029 EMAIL: cecilia@concord.edu	PREREQUISITES: ACT $\geq$ 19, Sat $\geq$ 460
TEXT: Sullivan : Algebra and Trigonometry, 5th edition. Upper Saddle River, NJ, Prentice -Hall.	Lab Manual: Pyzdowski CD: WvEB Algebra, Pyzdrowski available through your school

- **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.**

General Goals and Objectives:
- CONCEPTUAL UNDERSTANDING: rather than just rote memorization of algorithms
- MULTIPLE APPROACHES: to examine problems from analytical, geometric and numeric perspectives, to make judgments 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: to gain experience as a problem solver, to analyze problems in an organized manner
- APPLICATIONS: use mathematics to model and solve problems

The specific goals of this course will be to stress an algebraic, graphic, and numeric 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.

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:

Assessment	Number	Maximum Points Awarded
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 are permitted.	4	400
Comprehensive Final Exam: A comprehensive final worth 200 points	1	200
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. 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.	8	200
Quizzes: There will be 6 online homework quizzes and two 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 17, 2008 .	6	100
Each ACT Quiz can allow you to earn bonus course points: $1 \leq$ number correct ≤ 21, earn 1 bonus point $\quad 40 \leq$ number correct ≤ 41, earn 6 bonus point $22 \leq$ number correct ≤ 28, earn 2 bonus point $\quad 42 \leq$ number correct ≤ 44, earn 7 bonus point $29 \leq$ number correct ≤ 31, earn 3 bonus point $\quad 45 \leq$ number correct ≤ 47, earn 8 bonus point $32 \leq$ number correct ≤ 34, earn 4 bonus point $\quad 48 \leq$ number correct ≤ 49, earn 9 bonus point $35 \leq$ number correct ≤ 39, earn 5 bonus point $\quad 50 \leq$ number correct ≤ 60, earn 10 bonus point	2	20
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.	Will Vary	100

Grade: points ≥ 900 A; $900 >$ points ≥ 800 B; $800 >$ points ≥ 700 C; $700 >$ points ≥ 600 D; points < 600 : Fail

Concord University is committed to social justice. I concur with that commitment and expect to foster a nurturing learning environment based upon open communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with the Office of Disability Services (6086).

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.