

Instructor: Keith Foster

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Course Objectives:

1. To develop proficiency in algebra by:
 - a. working with equations and inequalities
 - b. understanding functions and their graphs
 - c. understanding exponential and log functions and their applications
 - d. using matrices and matrix operations
2. To develop problem solving skills

Textbook: *College Algebra with Intermediate Algebra: A Blended Course*, Beecher, Penna, Johnson & Bittinger, Pearson

Prerequisites: A grade of “C” or better in Intermediate Algebra (MATH 0103); a score of 24 - 28 on the math portion of the ACT; or an appropriate placement score.

Grading for Course: The numerical grade comes from the following sources:

- + *Unit Exams:* There will be two unit exams each worth 100 points (total: 200 pts)
- + *Homework:* Homework Assignments will be scaled to 50 points.
- + *Quizzes:* Quizzes will be scaled to 100 points.
- + *Final Exam:* The *final exam* is worth 200 points and *will* be comprehensive.

- + *Total Points:* Letter grade will be based on the percentage out of 550 points.

Homework Policy: You are *expected* to work all homework problems assigned by the due date, listed on *myMathLab* (MML), which also records the results. Since this is a three credit course meeting for only 8-weeks, you should expect to spend around *twelve* hours each week on homework and general overview of topics being covered (spread this time throughout the week). This is considered the norm for a college level course. It is very important to organize yourself so that you will receive the most credit for these assignments. Quizzes will be posted periodically on myMathLab. You will have a few attempts on each quiz given on MML, before the due date.

Participation Policy: Participation is expected and lack of participation will invariably prove detrimental to your grade and your learning experience. Regardless of the reason for not being able to access *myMathLab*, you will be responsible for any missed assignments, material and announcements. Do NOT wait until the last minute to complete assignments or quizzes.

Exam Policy: All exams will be taken using ProctorU, with a cost of \$4.25 per exam attempt. Each exam will be open for a week. You may take each exam up to twice, with your recorded grade being the best of the two attempts. Please note: you will have to pay the ProctorU fee for each attempt. Please read the “Information for classes that are onLine or Live Streaming” located on my website (<http://gkfoster.com>) for details on the expectations for taking the exam via ProctorU. Notes will not be allowed on exams. Only approved calculators are permitted on the Exams. The use of cell phones during testing time is prohibited. Once the exam has started, you cannot leave your computer for any reason. Partial credit will be added to each exam based on work shown. Therefore, show all work on sketch paper for each problem then scan into a PDF file and email to me within 20 minutes of completion of the exam. The better you organize your work, the easier for me to give partial credit.

Makeup Policy: There will be no make ups on exams, quizzes or homework. I may drop some of the quizzes, depending on the number given. All exams will count, since you will have a good length of time to complete each exam and can take each exam a second time. Given the amount of time allowed to complete assignments, quizzes, and exams, there is no reason to miss any exam or not complete any homework assignment or quiz.

Methods of Instruction: Instruction will take place through lectures (via MML Videos), readings and assigned problems.

Course Schedule: Below is a week-by-week breakdown of course coverage. Schedule is subject to change and email notice will be given.

Week	Dates	Coverage
1	Oct 20 – 22	<i>Course Intro (via email)</i> 2.2 - Functions and Graphs 2.3 - Finding Domain and Range 2.4 - The Algebra of Functions
2	Oct 25 – 29	2.5 - Linear Functions: Graphs and Slope 2.6 - More on Graphing Linear Equations 2.7 - Finding Equations of Lines; Applications 3.7 - Systems of Inequalities and Linear Programming 5.4 - Complex Rational Expressions
3	Nov 1 – 5	5.5 - Solving Rational Equations 6.1 - Radical Expressions and Functions 6.6 - Solving Radical Equations 6.8 - Increasing, Decreasing, and Piecewise Functions; Applications 7.2 - Transformations
4	Nov 8 – 12	<i>Exam #1 (Section 2.2 through Section 7.2)</i> 7.3 - The Complex Numbers 7.4 - Quadratic Equations, Functions, Zeros, and Models
5	Nov 15 – 19	7.5 - Analyzing Graphs of Quadratic Functions 8.1 - Polynomial Functions and Models 8.2 - Graphing Polynomial Functions 8.3 - Polynomial Division; The Remainder Theorem and the Factor Theorem 8.4 - Theorems about Zeros of Polynomial Functions 8.5 - Rational Functions
6	Nov 22 – 26	8.6 - Polynomial Inequalities and Rational Inequalities 9.1 - The Composition of Functions 9.2 - Inverse Functions <i>Thanksgiving Break</i>
7	Nov 29 – Dec 3	9.3 - Exponential Functions and Graphs 9.4 - Logarithmic Functions and Graphs 9.5 - Properties of Logarithmic Functions 9.6 - Solving Exponential Equations and Logarithmic Equations 9.7 - Applications and Models: Growth and Decay; Compound Interest
	Dec 6 – 10	10.1 - Matrices and Systems of Equations <i>Exam #2 (Section 7.3 through Section 10.1)</i>
8	Dec 13 – 17 Finals Week	Final Exam – taken using ProctorU by Thursday, December 16.