

Name of Course: Math 081; Basic Algebra

Name of Instructor: Mr. Mike Kiss

Course Length: Semester

Class Textbook: Elementary Algebra for College Students, 6th ed., by Allen R. Angel. Copyright 2004. Published by Prentice Hall. ISBN# 0-13-140024-x.

Class Description: This class is a review of basic algebra concepts initially covered in Algebra I. The review takes place over a semester and is intended to form a fundamental base for subsequent mathematics study. Skill level attained is determined by achievement on the COMPASS exam; scores earned on this test allow placement in college credit level classes. The main objective of Math 081 is to develop competency that leads to future success in more advanced coursework.

Course Content: Course completion will allow students to:

- 1. Use basic algebra vocabulary and notation accurately and appropriately.**
- 2. Apply real number properties to evaluate real number expressions accurately.**
- 3. Analyze linear function behavior by graph; and using slope and intercept in this interpretation.**
- 4. Perform basic polynomial operations.**
- 5. Analyze rational function behavior by graph, using horizontal and vertical asymptotes in this interpretation.**
- 6. Operate with rational expressions.**
- 7. Analyze quadratic function behavior by graph, using extrema and symmetry in this analysis.**
- 8. Solve linear, rational and quadratic equations; and use linear, rational and quadratic models to solve practical application type problems.**
- 9. Simplify radical expressions; and operate on radical expressions.**
- 10. Develop an appreciation for the history of algebra and its development.**

Course Assessment: Homework, quizzes, end of chapter exams, class participation and a comprehensive semester final exam (COMPASS exam) will be used in combination to assess course achievement. Homework and class participation is weighted 40%; quizzes 20%; and end of chapter tests 40%. There are a minimum (per semester) of 18 homework grades and 9 end of chapter tests.

Calculators are recommended. Models used in class are TI-34X and TI-83 plus.