Professor: Rebecca Heiskell
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Office: W263
Phone: 214-860-8777
Office hours: MW 9:30-11:00 TR 11:30-12:30
Meeting Days & Time: MW 2:00-3:20
Room Number: W230
Credit Hours: 3 Semester Hours

Division: Science, Technology, Engineering, & Mathematics (STEM)
Office Hours: M – F 8:00 am – 5:00 pm
Office Phone: 214-860-8760
Office Number: W120

Course Description: This course is an in-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

Course Pre-requisites: This is an entry-level course and is open to any student meeting TSI standards of college readiness (student must have appropriate assessment test score or have successfully completed DMAT 0310)

Course Materials/Supplies Needed
MyMathLab Access Code
No textbook required, ebook included with access code
COLLEGE ALGEBRA, by Sullivan, 11th edition
TI – 83 OR TI– 84 PLUS CALCULATOR Recommended

Core Statement:
MATH 1314 is a Tier 1 course in the Quantitative Reasoning learning category. “Knowledge and skills that are important to your success in other college courses will be introduced and reinforced in Tier 1. The Quantitative Reasoning category promotes the application of mathematics to increase your ability to solve “real-world” problem. When you are quantitatively literate, you can use logic and critical thinking in new ways.” - Catalog of the Colleges of DCCCD
Core Objectives:
MATH 1314 develops the following Core Objectives:

**Critical Thinking** – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

**Communication** – to include effective development, interpretation and expression of ideas through written and visual communication.

**Empirical and Quantitative Skills** – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Core Objective Development Statement:
MATH 1314 develops **Critical Thinking**, **Communication**, and **Empirical and Quantitative Skills** by requiring students to solve and analyze applications of various functions and systems of equations.

Learning Outcomes
Upon successful completion of this course, students will:

1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.
3. Apply graphing techniques.
4. Evaluate all roots of higher degree polynomial and rational functions.
5. Recognize, solve and apply systems of linear equations using matrices.

Course Outline:
Chapter 1     Equations and Inequalities
Chapter 3     Functions and Their Graphs
Chapter 4     Linear and Quadratic Functions
Chapter 5     Polynomial and Rational Functions
Chapter 6     Exponential and Logarithmic Functions
Chapter 8     Systems of Equations and Inequalities

Note: The instructor may omit certain topics in these chapters.

Evaluation Procedures:

Homework       20%
9 Quizzes       20%
8 Unit Test     30%
Final Exam      30%

Grading Scale:
If you complete the course:
90% or above    = A
80-89.99%       = B
70-79.99%       = C
60-69.99%       = D
Less than 60%   = F
Certification Procedures: (For Online Courses)
Register your access code at www.coursecompass.com and set up a login and password. Enroll in my course with course id number provided. You must be enrolled in my gradebook by census day to be certified as attending for financial aid purposes.

How the Course Is Designed

This course consists of 8 units:

- Unit 1- Equations Sections 1.2-1.4, 8.2
- Unit 2- Functions Sections 3.1-3.3
- Unit 3- Functions (cont) Sections 3.4-3.5, 4.3
- Unit 4- Polynomial Functions Sections 5.1- 5.3
- Unit 5- Rational Functions Sections 5.4-5.5
- Unit 6- Polynomial & Rational Ineq. & Zeros Sections 5.6-5.7
- Unit 7- Exponential & Logarithmic Functions Sections 6.1-6.3
- Unit 8- Exponential & Logarithmic Functions (Cont.) Sections 6.4-6.6

The components within each unit are:

1. Homework
2. Quiz
3. Test

The withdraw date for this class is November 27, 2019.

Institutional Policies: Institutional Policies relating to this course can be accessed from the following link: www.mountainviewcollege.edu/syllabipolicies