COLLEGE ALGEBRA
MATH. 1314. 63433 and 93454
Spring 2016
3/21/16 – 5/12/16

Professor: Rebecca Heiskell
Email: bheiskell@dcccd.edu
Office Phone Number: 214-860-8777
Office Number: W263
Office Hours: Mon-Thurs 9:45-11:00
Meeting Days & Time: Online
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: W147

Course Description: This course is an in-depth study and applications of polynomial, rational, radical, exponential, logarithmic, absolute value and piecewise-defined functions, and systems of equations using matrices. Also covered are the graphing calculator, non-linear inequalities, sequences and series, circles, the Binomial Theorem and a review of the classification of the real number system.

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
Required: MyMathLab Access code (ISBN#9780321199911)
          TI-83 OR TI-84 CALCULATOR

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 2     Graphs
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
Chapter 9     Sequences, Induction, the Binomial Theorem
Note: The instructor may omit certain topics in these chapters.

Evaluation Procedures:  
Homework 
4 Unit tests at 5% each  
4 Unit quizzes at 5% each  
Mid Term exam  
Comprehensive Final Exam

Grading Scale:  
90% or above  A  
80-89.9%  B  
70-79.9%  C  
60-69.9%  D  
Below 60%  F

Late Work Policy: No late work accepted.

Makeup Exam Policy: No make up exams.
Certification Procedures: In order to be certified as attending this online course for financial aid purposes, you must purchase the MML access code, enroll in the course, and begin work by completing at least one assignment by the certification date.

The withdraw date for this class is April 29, 2016.

Academic Dishonesty:
Students that caught plagiarizing an assignment will be subject to an “F” in the course and possible expulsion from the college.

Academic honesty is expected, and integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at https://www1.dcccd.edu/catalog/ss/code.cfm.

Institution Policies: Please visit http://www.mountainviewcollege.edu/Academics/Documents/Institutional%20Policies.pdf for a complete list of institutional policies (Stop Before You Drop; Withdrawal Policy; Repeating a Course; Financial Aid; Academic Dishonesty; Americans with Disabilities Act Statement; Religious Holidays; and Campus Emergency Operation Plan and Contingency Plan).