



Mountain View College

DALLAS COUNTY COMMUNITY COLLEGE DISTRICT

COLLEGE ALGEBRA

MATH. 1314.61002

Fall 2017

8/21/17 – 12/7/17

Professor: J. Duvall
Email: jduvall@dcccd.edu
Office Phone Number: 214-860-8633
Office Number: W209
Office Hours: TBA
Meeting Days & Time: MWF 9:05 – 10:00 am
Room Number:
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 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

COLLEGE ALGEBRA, by Sullivan, 10th edition (ISBN# 9780321979490)

(OPTIONAL) SOLUTION MANUAL (ISBN# 9780321979582)

TI – 83 OR TI-83 PLUS CALCULATOR REQUIRED

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
- Chapter 10 Probability

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

Instructor Attendance Policy:

Students are expected to attend all classes. Students have the responsibility to attend class and to consult with the instructor when an absence occurs. If for some reason you must leave class early, you should inform the instructor prior to the start of class of your reason for leaving early.

Students must begin attendance in all classes of enrollment. No exceptions. Financial Aid will not be granted to students who have been certified as not attending, by the certification date. For this lecture course, your physical participation in class, on or before the certification date will allow you to receive credit for FA purposes. For certification dates, check with the division or FAO for further information. Students, who are not certified as beginning class, are responsible for any payments due as a result of non-certification, to include the dropping of courses.

Grading Scale:

A = 270 points
B = 240 points
C = 210 points
D = 180 points
F = below 180 points

Evaluation Procedures:

There will be three (3) unit tests and an optional comprehensive final exam. The highest three (3) scores will be totaled. Each test is 100 points.

Late Work Policy: There is no late work policy since all work is exams.

Makeup Exam Policy: If a student misses an exam, then the student must take the final exam to replace the missed test score.

The withdraw date for this class is **November 9, 2017.**

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