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
ACCESS TO MYMATHLAB IS REQUIRED. You can purchase MyMathLab access, either bundled with a paper textbook or as a stand alone item, from the campus book store. You can also purchase MyMathLab access on line, directly from the publisher.

GRAPHING CALCULATOR IS REQUIRED. Recommended calculators are TI-84 Plus or TI-83 Plus. Cell phone calculators or calculators with CAS (for example, TI-89) are NOT permitted on exams or quizzes.

PRECALCULUS, by Sullivan, 10th edition (ISBN# 9780321978981)
Because MyMathLab contains a complete electronic textbook, purchase of a paper textbook is optional.

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:
Appendix A  Equations and Inequalities
Chapter 1  Graphs
Chapter 2  Functions and Their Graphs
Chapter 3  Linear and Quadratic Functions
Chapter 4  Polynomial and Rational Functions
Chapter 5  Exponential and Logarithmic Functions
Chapter 11  Systems of Equations and Inequalities

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

Evaluation Procedures:
There are homework assignments from each textbook section. You must complete all assignments on line, using MyMathLab. You can access MyMathLab from any computer with internet access. You can work any assignment and any individual question in any assignment as many times as you like until the deadline date/time. Each time you re-answer a question, your score for that assignment will be updated. Your overall homework score will comprise 15% of your course grade.

There are (approximately) daily quizzes. Each quiz will consist of one question. You may use your class notes on the quizzes. The overall quiz average will comprise 5% of your course grade. The lowest four quizzes will be dropped before the quiz average is calculated.

There are four chapter exams and a comprehensive final exam. All exams will be pencil and paper. Notes are NOT allowed on the exams. Chapter exams will be given in the Mountain View College Testing Center. The final exam will be in our normal classroom. The average of the exams will comprise 80% of your course grade. The lowest chapter exam score will be replaced with the final exam score if the replacement will increase your course grade.
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:
Numerical course grade will be calculated as
\[ 0.05 \text{x quiz average} + 0.15 \text{x homework average} + 0.8 \text{x test average}. \]
Numerical course grade will be converted to a letter grade by

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Late Work Policy:
The “Homework” section of MyMathLab shows a due date/time for each homework assignment. Please treat these dates as “deadlines” rather than “due dates”. To get maximum benefit from the homework, begin working on each assignment as soon as possible after we discuss the associated topic in class. Extensions to homework deadlines will be available only under extraordinary and unforeseeable circumstances.

Makeup Exam Policy:
Because the lowest chapter exam score can be replaced with the final exam score and because of the extended time available for exams, makeup exams will be available only under extraordinary and unforeseeable circumstances. Missed quizzes cannot be made up.

The withdraw date for this class is September 29, 2017.

Academic Dishonesty: (edit if needed)
Students caught using unauthorized materials during an exam 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.).
9.1 Institutional Policies

Students with Disabilities: If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please request that the DSO send your accommodation letter to me as soon as possible (students are encouraged to contact DSO at the beginning of the semester). For more information regarding the College Disability Services Office, please visit the Student Services website: dcccd.edu/DS Offices or contact DCCCD Office of Institutional Equity at (214) 378-1633. For information at Mountain View call 214-860-8677

A Note on Harassment, Discrimination and Sexual Misconduct: We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence, stalking), retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity, and/or gender expression, please contact your College Title IX Coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

- College Title IX Coordinators: Mountain View College: Regina Garner TitleIX-MVC@dcccd.edu 214-860-8561
- Dallas Colleges Online: Le’Kendra Higgs TitleIX-LEC@dcccd.edu 972-669-6672
- District Title IX Coordinator Office of Institutional Equity: LaShawn Grant TitleIX-District@dcccd.edu 214-378-1633

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.).

Course Calendar

Monday, August 21: First class meeting
Thursday, September 14: Deadline for Appendix A exam
Thursday, September 21: Deadline for ch 1-2 exam
Friday, September 29: Deadline for ch 3-4 exam
Last day to withdraw with a grade of W
Friday, October 6: Deadline for ch 4 -5 exam
Wednesday, October 11: Final Exam