



# MATH 1710 E01

Fall 2020

## Instructor Info

- Vinay Kanth Rao Kodipelly
- Flexible, Email me
- DUNN Hall 352
- TBA
- vkdpelly@memphis.edu

## Course Info

- Online Instruction
- MWTR
- TBA
- Online

## Office Hours

- Mon-Fri
- By appointment
- Online

## Important Dates

Aug 30	Last day to add/drop
Aug 31- Oct 2	Course Withdraw 'W' grade

## Overview

To expand the student's ability to analyze linear, quadratic, polynomial, root, rational, exponential, and logarithmic functions using graphical, numerical and analytic methods. Through the use of the graphing calculator and graphical analysis and through the methods of partial fractions, synthetic division, theory of equations and inequalities to extend the student's ability to solve problems with algebraic tools in a variety of applications.

## COMBO Sections

These are special sections that meet 5 hours per week and are designated by an "E" in the section number. Combo sections have lower prerequisite requirements and cover some additional preparatory material. Combo sections still count as 3 credit hour courses, and completing a combo section is equivalent to completing a regular section as far degree and course prerequisite requirements.

## Prerequisites

ALEKS math assessment test. An ALEKS score of 46–60 places you in regular sections of Math 1710. An ALEKS score of 30–45 places you in combo sections of Math 1710.

## Student Population

Lower Division Students. This course is a prerequisite for Elementary Calculus (Math 1830) and Trigonometry (Math 1720), and will fulfill a lower division mathematics requirement in some degree programs (confirm with your academic advisor). **Note:** only one of Math 1710 or Math 1730 may be used to satisfy degree requirements.

## Method of Instruction

This course is taught as a guided lecture, which means notes will be given in lecture format while examples will be worked with the help of the students in the class. Questions will be asked and are expected to be answered by the students in the class.

## Textbook

College Algebra. UofM Custom Edition with [MyMathLab](#) by Beecher, Penna, Bittinger. This will be shrink wrapped with MML student access code, which cannot be purchased online. The access code purchased with the book at The Tiger bookstore or on campus bookstore are the only access codes that will work.

## Grading Scheme

5%	Project
10%	Quizzes
25%	Online and Offline Homework
30%	Tests
30%	Final Exam

Grades will follow the standard scale:  $A \geq 90$ ;  $B = 80 - 89.99$ ;  $C = 70 - 79.99$ ;  $D = 60 - 69.99$ ;  $F < 60$ .

I do not round up. There is no curve.

## Email Requirements

ALL correspondence will be made through your University of Memphis email account. Check your email each day and do not let your inbox get so full that no new messages will get through. U of M email is the official method of correspondence.

## Class Schedule/ Expectations

This semester MATH 1710 is being offered as a Remote Course for the first month, lectures will be held over Zoom during scheduled class time. The time and URL for each Zoom meeting will be communicated in advance via email and it will be posted in eCourseware. Zoom lectures will be recorded and posted in eCourseware. And the course may open after that as a Hybrid Course which may mean we will only be meeting on campus on certain assigned dates. You will get a schedule of these days and times before the campus classes begin. You must wear a mask to enter the room. Please take time to go to the following page and read what the administration and faculty believe to be important considerations for you, as a student, to consider regarding the COVID-19 virus.

<https://www.memphis.edu/msci/news/covid.php>

*Depending on the current circumstances, we might go fully online!*

## Homework and Quizzes

Mathematics is learned by practice, and confidence is gained through mastery of the material. Homework will be assigned daily in class and is due at the beginning of the next class. There might be occasional quizzes. The time spent on homework will vary, but a good rule of thumb is 2 hours for every hour spent in class, adding more time to prepare for tests. It is essential not to get behind; we will work at a brisk pace.

**Do not let yourself get behind in class!** As in most math courses, the material progressively builds upon itself. If you do not understand a particular topic, ask in class or in office hours. The instructor reserves the right to make changes in the syllabus if necessary due to time constraints or other unforeseen events. If this is necessary, members of the class will be notified.

## Make-up Policy

Make-up exams or assignments will only be allowed for students who have a substantiated excuse approved by the instructor *before the due date*. Leaving a phone message or sending an e-mail without confirmation is not acceptable.

## Departmental Tutoring

Departmental Tutoring: The Math Learning Center is offering only online tutoring during this semester at [www.memphis.edu/onlinetutoring](http://www.memphis.edu/onlinetutoring).

## Active Learning

Our class meetings may feel very different from what you've experienced in other math classes. You will be expected to work on problems and present solutions in class. I expect you to generate ideas and to compare approaches in group problem-solving. Expect to be challenged, but keep participating! It will be fun, and I believe that you can learn math better than ever!

## Academic Integrity

I encourage you to work with your classmates on homework or to have study groups for tests; however, letting someone else do all the work while you just sit back and copy will not help you on your tests. Copying the work of others is not going to help you understand the material or pass the course. Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly, through participation or assistance will receive a zero, in addition to other possible disciplinary sanction which may be imposed through the regular institutional disciplinary procedures.

## Language and behavior

I do not tolerate profanity or rude behavior. You are free to express any opinion you choose, but you must do so in a manner that conforms to the formal, respectful setting of a classroom lecture. Mathematicians value the ability to reason and to solve problems, not the ability to inflame passions or to express oneself colorfully. If a student violates this policy during lecture, I will ask that student to leave the room immediately.

## Disabilities

Any student who anticipates physical or academic barriers based on the impact of a disability should contact Disability Resources for Students (DRS) at 110 Wilder Tower, 901.678.2880 at the earliest opportunity. DRS coordinates access and accommodations for students with disabilities. You must give your instructor a copy of any accommodation memos provided by the DRS within the first week of class.

**Course schedule:** Any changes of this schedule will be announced in class, and in writing.

### **Chapter 1: Graphs, Functions, and Models**

- Introduction to Graphing
- Functions and Graphs
- Linear Functions, Slope, and Applications
- Equations of Lines and Modeling
- Linear Equations, Functions, Zeros, and Applications
- Solving Linear Inequalities

### **Chapter 2: More on Functions**

- Increasing, Decreasing, and Piecewise Functions; Applications
- The Algebra of Functions
- The Composition of Functions
- Symmetry and Transformations
- Variation and Applications

### **Chapter 3: Quadratic Functions and Equations; Inequalities**

- The Complex Numbers.
- Quadratic Equations, Functions, Zeros, and Models
- Analyzing Graphs of Quadratic Functions
- Solving Rational Equations and Radical Equations
- Solving Equations and Inequalities with Absolute Value.

### **Chapter 4: Polynomial Functions and Rational Functions**

- Polynomial Functions and Models
- Graphing Polynomial Functions.
- Polynomial Division; The Remainder Theorem and the Factor Theorem
- Theorems about Zeros of Polynomial Functions
- Rational Functions
- Polynomial Inequalities and Rational Inequalities

### **Chapter 5: Exponential Functions and Logarithmic Functions**

- Inverse Functions
- Exponential Functions and Graphs
- Logarithmic Functions and Graphs
- Properties of Logarithmic Functions
- Solving Exponential Equations and Logarithmic Equations
- Applications and Models: Growth and Decay; Compound Interest