

The University of Memphis

COLLEGE ALGEBRA (MATH1710)

Schedule : MW 5.30pm-6.55pm.

Instructor : Sovanlal Mondal (Note: I have no problem with students referring to me as Mr. Mondal or Sovanlal or simply as Mondal.)

Instructor details :

- B.Sc. in Mathematics, 2015
- Masters in Mathematics (M.Math), 2017

email : smondal@memphis.edu

Office Hours : TR 3pm-4pm.

Course Description : (3 credit hours.) Analysis of functions (linear, quadratic, polynomial, root, rational, exponential, logarithmic); partial fractions; conic sections; theory of equations; inequalities; applications.

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.

Mymathlab plus tech support number: 844.292.7015.

Mymathlab website: <http://mymathlab.com/>

Prerequisites : An ALEKS score of 46–60 places you in regular sections of Math 1710. An ALEKS score of 30–45 places you in Special Combo sections of Math 1710.

Method of Instruction : Currently the university will hold classes remotely for the first month of class. During this time, all lectures and assessments will be given via ZOOM and eCourse-ware . My current plan is to keep remote instruction through the end of the semester unless instructed to do otherwise. In future, if we plan to meet in person, I will discuss with the students about the option of returning to face-to-face instruction and I will send further instruction that time.

Graphing Calculator : You will need to have TI 83 or TI 84 for classroom use. TI 89s and TI 92s are prohibited. Cell phones **Cannot** be used as calculators.

Tutoring : **Free** tutoring is available through the University's Education Support Programs. They offer a drop-in tutoring service in the Math Learning Center in DH 341 and online assistance.

Grading Policy : There will be homework assignments from each section covered, which constitute 30% of the final score, three tests (two after the dropped exam) which will worth 20% of the final score and a COMPREHENSIVE final exam worth 40% of the final score. The lowest of the three tests will be dropped. The remaining 10% of the score will come from attendance and class performance. Grading Scale: A:90-100; B:80-89; C:70-79; D:60-69; F:0-59.

Homework : Homework will be assigned from each section covered. Again, this homework is on MYMATHLAB. They will be due at 11:59 pm on the due date. You will be given ample time to complete the assignments; therefore, **No Extensions** will be granted for any reason. The two lowest homework assignments will be dropped.

Final Exam Schedule : The final exam will take place on Wednesday, Nov 18, 5:30pm - 7:30pm. I will send you more details later about how the exam will be conducted.

Academic Integrity and Other Ground Rules :

1. 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 understand the material or pass the course.
2. 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.
3. All email correspondence must be made through your University of Memphis email account. Check your email daily, and make sure that your "inbox" isn't so full that no new messages will get through. Also, please check your eCourseware on regular basis.
4. If you show up late for an exam, you forfeit the missed time. This means, for example, if you arrive to class thirty minutes after the exam has started, you do not get an additional thirty minutes for the exam. Your exam is due at the same time as the other students.

5. Any student who would like additional accommodations in class should contact the Office for Students with Disabilities located in Wilder Tower suite101. Any student wishing to have these resources must submit paperwork to me **within the first week of class**.
6. No Make-ups for a missed homework, quiz, test, or final exam. If you must miss a test because of an official school function you may schedule to take the test at a time prior to the original test date. No other rescheduling will be allowed.
7. Final grades are final (unless a calculation error was made).

Chapter I: 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

Final Note : The details listed in the syllabus are a guideline for what to expect in the class. I reserve the right to alter the course guidelines based on necessity. Any changes of this schedule will be announced in class, and in writing.