



Math 597.001 Continuous Mathematics

COURSE SYLLABUS: Summer 2016

Instructor: Rebecca Dibbs, PhD

Office Location: 303 Binnion

Office Hours: by appointment

University Email Address: rebecca.dibbs@tamuc.edu

COURSE INFORMATION

Materials

Textbook(s) Required: Introduction to Real Analysis (3rd Edition) Bartle & Sherbert. ISBN: **978-0471321484**. (You ought to be able to find this for under \$20 used on Amazon)

Course Description: This is a course in mathematical analysis - the theory behind calculus. We will explore select topics in analysis with the goal of gaining a deeper understanding of the real numbers and continuous functions.

Student Learning Outcomes

Our goal is to gain a deep conceptual understanding of the theoretical underpinnings of two vital components of the algebra to calculus sequence often taken for granted: the real numbers and continuous functions. We will develop both intuitive and rigorous insight into these objects by exploring limits and convergence, topological notions, differentiability and the interplay between all of these. Additionally, exploring these topics will further develop our mathematical toolkit, including role of definitions, conjectures, theorems and proofs.

COURSE REQUIREMENTS

Course Activities

This is a specification-graded course. See specification table for requirements for each grade band.

Pencasts: Each activity has a short Pencast lecture associated with it. You will be expected to watch these before attempting an activity.

Homework: There will be problems assigned for each section. Homework will be due at 11:50 pm CST on Sunday. These problems will be closely related to the activities. Homework may be completed on your own or in groups.

Midterm: The midterm exam will be take home. It is based on the first three homework assignments. It must be completed individually.

Final Exam: The final exam is also take home. There are three parts. Part I is based on homework problems and activities.

Projects: There are two projects in this class. One is a reflection paper about your learning and the other asks you to design a lesson incorporating the ideas you learned in this class into a course you teach, TA, or may teach in the future. See assignment specifications for more details

Discussion Board: There is a discussion board for this course. However, you are expected to post all questions about assignments in the discussion board. This way everyone can see the questions asked and the answer

GRADING

Grade	Specification
F	At least one D specification not met
D	2 Homework completed to specification 3-5 late assignments At least 1 C specifications not met
C	All D specifications Pass Midterm Pass Final Exam 0-2 Late assignments 3 Homework completed to specification At least 1 B specification not met
B	All C specifications 4 Homework completed to specification Project 1 At least 1 A specification not met
A	All B specifications 5 HW completed to specification Project 2

TECHNOLOGY REQUIREMENTS

You will need reliable internet access for this course. A graphing calculator or wolfram alpha may also come in handy from time to time.

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

My primary form of communication with the class will be through Email and Announcements. Any changes to the syllabus or other important information critical to the class will be disseminated to students in this way via your official University Email address available to me through MyLeo and in Announcements. It will be your responsibility to check your University Email and Announcements regularly.

Students who Email me outside of regular office hours can expect a reply within 24 hours M-F. Students who Email me during holidays or over the weekend should expect a reply by the end of the next regularly scheduled business day.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at <https://leo.tamuc.edu>.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In **ALL** instances, incidents of academic dishonesty will be reported to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test or assignment
- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment

If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

University Specific Procedures

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See *Code of Student Conduct from Student Guide Handbook*).

COURSE OUTLINE / CALENDAR

WEEKLY SCHEDULE:
see "Course Documents"