MATH 5345 section 001 – Concepts and Techniques in Analysis
5:30-8:20pm Monday
305 Pickard Hall
Fall 2013

Instructor: Dr. Theresa Jorgensen
Office: 434 Pickard Hall
Phone: (817) 272-1321 (my office); (817) 272-3261 (Math Department office)
email: jorgensen@uta.edu
Office hours: MW 2-3pm and by arrangement
Course website: Blackboard – can be accessed at https://elearn.uta.edu/

Textbook: *A Radical Approach to Real Analysis* (ISBN 978-0-88385-747-2) Second Edition by David Bressoud, published by the Mathematical Association of America

Materials: Graphing calculator

Course goal: The purpose of this course is to understand the concepts that underlie the development of mathematical analysis.

Course schedule: This schedule may be adjusted to meet the educational needs of the students enrolled in this course.

Date	Sections studied
August 26	Chapter 1: Sections 1.1 &1.2, Chapter 2: Sections 2.1 & 2.2
September 2	Labor Day holiday – no class
September 9	Chapter 2: Sections 2.3 & 2.4
September 16	Chapter 2: Sections 2.5 & 2.6
September 23	Chapter 3: Sections 3.1 & 3.2
September 30	Chapter 3: Section 3.3
October 7	Quiz 1, First HW set due
October 14	Chapter 3: Sections 3.4 & 3.5
October 21	Chapter 4: Sections 4.1 & 4.2
October 28	Chapter 4: Sections 4.3 & 4.4
November 4	Chapter 5: Sections 5.1 & 5.2
November 11	Quiz 2, Second HW set due
November 18	Chapter 5: Sections 5.3 & 5.4
November 25	Chapter 6: Sections 6.1 & 6.2
December 2	Chapter 6: Sections 6.3 & 6.4
December 9	Final Exam, Third HW set due

Details: Homework will consist of, but not be limited to, write-ups of problems discussed in class, write-ups of problems worked independently outside of class, summaries and responses to readings of journal articles, and presentations of assigned problems.

You are encouraged to discuss and work on the homework in groups as we will often do in class, but each of you should always submit individual work.

Periodically, you will be asked to write a reflection about topics in analysis or the teaching of topics mathematically related to analysis.

Much of our time will rely on you actively participating in small and large group discussions. Thus your participation grade will depend heavily on your attendance and your gung-ho participation in all discussions.

You will turn in all assigned homework problems at three different intervals established in the course schedule above. A selected portion of the homework handed in will be graded. For the homework assigned on a given Monday, you can (optional) hand in two exercises from the assigned homework for more feedback. These are handed in at the class meeting the following Monday.

There will be two in-class, open-book, open-notes quizzes, as well as a comprehensive final exam. If you stay connected in the course and work to your potential, you will find the quizzes to be a welcome challenge rather than a cause for concern. The final exam is cumulative. The final exam will be Monday, December 9.

Please note that class begins at 5:30. Since this course relies heavily on group participation, more than one absence from our weekly class time or excessive late arrivals to class will lower your final grade.

Grade:

Homework	55%
Quiz 1	10%
Quiz 2	10%
Final Exam	15%
Participation	10%

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/).

Americans with Disabilities Act: The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request

honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

> *I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*
>
> *I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at www.uta.edu/resources.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit. When you exit PKH 305, there are stairways at the end of the hallway in either direction. There is also a central stairway (which only goes down to floors 1 and 2) located next to the elevator. To reach the elevator/central staircase, turn right out of 305, then turn left at the first corner. The elevator/stairs will be to your left halfway down that hallway.. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.