Math 2326 - Introduction to Abstract Mathematics
Spring 2008

Instructors: Dr. E. Cabral Balreira, Dr. Ryan C. Daileda, & Dr. Brian K. Miceli

Course URL: `http://ramanujan.math.trinity.edu/tumath/courses/2326/index.shtml`

All information which is pertinent to this course can be found at the above website. All of the instructors' contact information, office hours, and individual websites can be found there. All information regarding exams and homework assignments will be posted there as well.

Time and Place: MWF 12:30 AM - 1:20 AM, Marrs McLean Science Building (MMS), Room 141

Office Hours: Consult the Course URL.

Prerequisites: A passing grade in Math 1308 or 1312

Course Content: This class is first and foremost a course in logical reasoning and communication. This course will begin with an introduction to set theory and structured logic, including the fundamental techniques used for proving mathematical statements. From there we will cover selected topics in abstract algebra, real analysis and point set topology.

Expectations: Each student is expected to invest a significant amount of work and thought outside the classroom for every hour of lecture. Moreover, work submitted for a grade in this course will be graded in a most rigorous fashion, and thusly, such work should have a great deal of thought and care put into it. Work which is sloppy or messy or that which is not written in a clear and coherent fashion will be marked down. This includes losing points for grammatical errors, spelling mistakes and similar offenses. This course is a gateway course to many upper-division mathematics courses, including Number Theory, Combinatorics, Non-Euclidean Geometry, Abstract Algebra, and Real Analysis, and the high level of work that will be expected in this course is to ensure that students who pass this course have the best opportunity for success in future math courses.

Homework: Homework assignments will be due daily at the beginning of class unless otherwise stated. Homework will be assigned after every lecture and that assignment will then be posted on the web page later that day with a due date of the **next** class period. Except for extreme circumstances, late homework will not be accepted for any reason, and unexcused late and missing papers will be given a grade of zero (0). Graded homework exercises are to be written neatly using one side of 8.5×11 inch paper, and multiple pages must be stapled together before you come to class. Each problem must be done on its own page, and each page should contain the student's name, the date, and the problem number. Do not use paper from a spiral notebook unless you can tear off the ragged edge.

Collaboration is a very important part of mathematics, and we encourage everyone to work together on homework assignments. That being said, it is never acceptable to simply pass off someone else's work or ideas as your own. Therefore, you must cite sources on any work that is to be turned for a grade, whether it is from a textbook or from another student in class. Citing sources and giving credit to others for their ideas is a crucial part of any higher level of education, and this rule is not to be taken lightly, but also understand that you will in no way be penalized for quoting a textbook or getting a proof idea from a classmate as long as everything is cited properly.

Portfolio: At the semester's end, each student will turn in a portfolio of problems. The point of the portfolio will be to turn in final versions of problems which are representative work done by each student throughout the semester. In keeping with the expectations of the course, the problems

submitted in your portfolio must be typeset, preferably in Latex. While most of the problems will be from previous homework assignments and exams, the instructors reserve the right to place new problems on this assignment. Although more information will become available towards the end of the semester, the final portfolio will require students to submit work which has been previously graded in order to show their progress their through the course of the semester.

Midterm Exams: There will be three evening midterm exams during the semester. The dates, times and locations for the exams will be announced in class and posted to the course web page as they become more concrete. If you have a legitimate conflict with the exam dates/times once they are selected, please contact one of the instructors as soon as possible. Please do not wait until shortly before the exam.

Final Exam: A cumulative exam will be given in the regular classroom on Saturday, May 10th, from 8:30 to 11:30 in the morning.

Attendance: Attendance is highly encouraged but is not mandatory. Roll will not be taken, but excessive absences should be explained to the current instructor.

Grades: Your overall score in the course will be based upon your scores on the homework, final portfolio, midterm exams, and the final exam. The point values are as follows:

Homework:	30%
Portfolio:	10%
Exams:	36%
Final Exam:	24%

Your letter grade will be determined by your overall percentage at the semester's end, as well as by how well the class performs overall.

Academic Integrity: All students are covered by a policy that prohibits dishonesty in academic work. The Academic Integrity Policy (AIP) covers all students who entered Trinity before the fall of 2004. The Academic Honor Code covers all those who entered the fall of 2004 or later. The Integrity Policy and the Honor Code share many features: each asserts that the academic community is based on honesty and trust; each contains the same violations; each provides for a procedure to determine if a violation has occurred and what the punishment will be; each provides for an appeal process. The main difference is that the faculty implements the AIP while the Honor Code is implemented by the Academic Honor Council. Under the Integrity Policy, the faculty member determines whether a violation has occurred as well as the punishment for the violation (if any) within certain guidelines. Under the Honor Code, a faculty member will (or a student may) report an alleged violation to the Academic Honor Council. It is the task of the Council to investigate, adjudicate, and assign a punishment within certain guidelines if a violation has been verified. Students who are under the Honor Code are required to pledge all written work that is submitted for a grade: "On my honor, I have neither given nor received any unauthorized assistance on this work" and their signature. The pledge may be abbreviated "pledged" with a signature.

Disability Services for Students: If you have a documented disability and will need accommodations in this class, please speak with one of the instructors privately early in the semester so that we may be prepared to meet your needs. If you have not already registered with Disability Services for Students, contact the office at 999-7411. You must be registered with DSS before we can provide accommodations.