

# Syllabus for Mathematics 555/704I, Section 505/001, Spring 2013

TIME AND PLACE: MWF 11:15am–12:05pm, LC LC 303b

INSTRUCTOR: Ralph Howard

OFFICE: LC 304

PHONE: 777-7471

OFFICE HOURS: MW 2:30pm–3:30pm and by appointment

TEXT: William F. Trench: *Introduction to Real Analysis* Available on line at [http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH\\_REAL\\_ANALYSIS.PDF](http://ramanujan.math.trinity.edu/wtrench/texts/TRENCH_REAL_ANALYSIS.PDF) Free legal download. Reproduction is permitted for any valid noncommercial educational, mathematical, or scientific purpose.

**Grading:** There will be three hour exams of 100 points each. Homework will be collected and will count for 150 points. The Final will count for 150 points. There will be in class quizzes that will be included as part of the homework grade.

|                                 |            |
|---------------------------------|------------|
| Three midterms @100 points each | 300 points |
| Final                           | 150 points |
| Homework (includes quizzes)     | 150 points |
| Total                           | 600 point  |

The grade will be based on the total number of points out of the 600 points. Note that the homework counts as much as the final so it is important to spend time on the homework. Some homework may be “collected” in the form of in class quizzes. Letter grades will be assigned to all the tests. The last day to drop is Monday, March 4 and you should have a good idea of where you stand by then.

**There will be no make up exams.** If you miss a test, then your score on that exam is 75% of the average of your other test scores (including the final). If you miss a second exam then the score on it is zero. Likewise **no late homework will be accepted.**

The exams will be on the following days:

Test 1 Monday, February 18

Test 2 Wednesday, March 27

Test 3 Monday, April 22

Final Saturday, May 4, 9:00am

**Learning Outcomes:** Successful students in Analysis II will become knowledgeable about and will master concepts of real analysis. They will improve their ability to write and read mathematical proofs, particularly those related to the least upper bound axiom, compactness, sequences, continuity, uniform continuity, differentiation, Riemann integration, the fundamental theorem of calculus and interchange of limit processes.