Syllabus for Mathematics 580/780I, Section 001/001, Fall 2014

Time and Place: 2:20 pm - 3:10 pm MWF Leconte 121
Instructor: Ralph Howard Office: LC 304 Phone: 777-7471
Office Hours: TTh 2:30pm–3:30pm, W 3:30–4:30 and by appointment
Texts:
Number Theory by George E. Andrews which is online in pdf format at
`https://archive.org/details/NumberTheory_862` or a hard copy can be gotten from Amazon
`www.amazon.com/Number-Theory-Dover-Books-Mathematics/dp/0486682528`
for under $15.00

Elementary Number Theory by Peter Hackman which is online in pdf format at
`http://www.freebookcentre.net/maths-books-download/Elementary-Number-Theory-(PDF-415P).html`

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

Three midterms @100 points each	300 points
Final	150 points
Homework (includes quizzes)	100 points
Total	550 point

The grade will be based on the total number of points out of the 550 points. Note that the homework counts as much as a test so it is important to spend time on the homework. Some homework many be "collected" in the form of in class quizzes. Letter grades will be assigned to all the tests. The last day to drop is Thursday, October 9 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 80% 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	Wednesday, September 24
Test 2	Wednesday, October 22
Test 3	Monday, November 24
Final	Monday, December 8 at 9:00 am

Learning Outcomes: Successful students in Math 580 with learn about prime numbers, the fundamental theorem of arithmetic, modular arithmetic, solving linear Diophantine equations, Pythagorean triples, primitive roots and quadratic residues. They will also learn to write proofs of basic number theoretic results.