Number Theory

Math 3400.001, Spring 2010, MWF 10:00-10:50, Language 315

Professor: Dr. Conley, GAB 419, 565-3326, conley@unt.edu. Assignments and announcements will be posted at www.math.unt.edu/∼conley.

Office Hours: MW 11:00-12:30, F 11:00-12:00

Text and Prerequisites: The text is *Elementary Number Theory and its applications,* fifth edition, by K. Rosen. The prerequisites are Real Analysis (3000) or Discrete Math (2770).

Exams, Homework, and Grading: There will be two 100 point midterms, on the Wednesdays of February 24 and April 7, and a comprehensive 180 point final on Wednesdayday, May 12, 8:00-10:00. There will also be twelve problem sets, worth 10 points and usually due Fridays at the beginning of class. There will be no make-up exams, and late homework will not be accepted.

Disabled Students: Please let me know of your disability at the end of the first lecture.

Tentative Plan: I hope to cover most of Chapters 1, 3, 7, and 9, parts of Chapters 4, 5, and 6, and a few sections from Chapter 11, 12, or 13. This is flexible: if there is anything in the book you would particularly like to see, please let me know.

Problem Set 1 (due Friday, January 29) (in parenthesis: fourth edition problems):

Section 1.3: 6, 8, 12, 18 (*Section 1.2:* 6, 8, 12, 18)

Section 1.4: 8, 14, 34 (*Section 1.3:* 4, 6, 24)

Section 1.5: 6-8, 16, 24, 28, 30 (*Section 1.4:* 6-8, 16, 32, 36, 40, 42)

Section 3.1: 2, 6, 8, 10, 12, 14 (*Section 3.1:* 2, 6, 10, 12, 16, 24)