Mathematics 328K   **Summer term 2012**   **Unique #92135**

Instructor: Professor Jeffrey Vaaler
                       Office: RLM 9.126
                       Office Phone: 471-7125
                       e-mail address: `vaaler@math.utexas.edu` (read daily)
                       Office hours: Monday from 1:00 pm to 2:00 pm,
                                and Thursday from 3:00 pm to 4:00 pm
                       Class meetings: MTuWThF from 10:00 am to 11:15 am in RLM 6.114
                       First class day: Thursday, May 31
                       Last class day: Thursday, July 5

Text: Kenneth H. Rosen, *Elementary Number Theory, Sixth Edition*, Addison Wesley Longman, (2011).

Prerequisites: Students are assumed to have had either M341 or M325K, with a grade of at least C.

Homework: Homework assignments will be due on most Tuesdays and Fridays, as indicated on page 3. But notice that the last homework assignment is due on Thursday, July 5.

Late homework will not be accepted.

Exam dates: There will be one 75 minute exam in class on Friday, June 22. There will be a final exam (as scheduled in the UT course schedule) on Friday, July 6, from 9:00 am until noon.

Exam format: The exam on June 22, will have six questions. The exam questions will be similar to the homework problems.
     The final exam on July 6, will have twelve questions. The questions will be similar to the homework problems assigned during the course.

Term grade: The homework scores will determine 25% of your grade. The exam on June 22 will account for 25% of your grade, and the final exam will account for 50% of your grade. Your final grade will then be determined as follows:

	92 – 100 points: A,	90 – 91 points: A-,
88 – 89 points: B+,	82 – 87 points: B,	80 – 81 points: B-,
78 – 79 points: C+,	67 – 77 points: C,	65 – 66 points: C-,
63 – 64 points: D+,	52 – 62 points: D,	50 – 51 points: D-,
less than 50 points: F.		

Notes: Should it be necessary to miss an exam due to illness or a death in your family, please notify me by e-mail as soon as possible.

"The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY."

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Approximate schedule of lectures:

The following is an approximate schedule of the sections from the text *Elementary Number Theory, Sixth Edition*, by K. H. Rosen, that will be covered by lectures in class. The subject matter of the course is esentially the subject matter of the sections of the text listed here.

May 31: Sections 1.1, 1.2
June 1: Section 1.3, Appendix B

June 4: Section 1.4, 1.5
June 5: Section 3.1
June 6: Sections 3.2, 3.3
June 7: Section 3.4, 3.5
June 8: Section 3.7

June 11: Sections 4.1, 4.2
June 12: Section 4.3
June 13: Section 4.4
June 14: Sections 4.4
June 15: Section 6.1

June 18: Sections 6.1
June 19: Section 6.3
June 20: Section 6.3
June 21: Review
June 22: Midterm Exam in class

June 25: Sections 7.1, 7.2
June 26: Section 7.4, 9.1
June 27: Sections 9.1, 9.2
June 28: Section 9.2, 9.3
June 29: Section 9.3, 9.4

July 2: Section 11.1, 11.2
July 3: Section 11.1, 11.2
July 4: Holiday–class does not meet
July 5: Review
July 6: Final Exam from 9:00 am to noon.

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Schedule of homework assignments:

The following homework problems should be handed in by the end of class on the dates indicated. All homework assignments are from the text *Elementary Number Theory, Sixth edition*, by K. H. Rosen.

Due on June 5: Section 1.2 #22; section 1.3 #6, #8; section 1.4 #10; section 1.5 #34, #38.

Due on June 8: Section 3.1 #8; section 3.3 #10, #14, #24, #26; section 3.4 #2.

Due on June 12: Section 3.4 #4; section 3.5 #10, #32, #40, #42, #56.

Due on June 15: Section 3.5 #66, #70; section 3.7 #2, #20, #24; section 4.1 #4.

Due on June 19: Section 4.1 #12, #24, #30; section 4.2 #6, #18; section 4.3 #4.

Due on June 22: Section 4.3 #10, #14; section 4.4 #2, #4, #6, #8.

Due on June 26: Section 6.1 #20, #22, #34; section 6.3 #6, #10; section 7.1 #22.

Due on June 29: Section 7.1 #32, #40, #42; section 7.2 #12, #22; section 7.4 #22.

Due on July 3: Section 9.1 #10, #16, #18; section 9.2 #8, #16; section 9.3 #4.

Due on July 5: Section 9.4 #2, #4, #10; section 11.1 #14, #48; section 11.2 #2.