Instructor:	Kelly McKinnie	**Time:**	MWF 10:00-10:50AM
Office:	412 Herman Brown	**Classroom:**	Duncan Hall 1075
Email:	mckinnie@rice.edu	**Office Hours:**	Tues 10-11 Thurs 3-4 by appt.
Phone:	x4597	**First week OH:**	open door
Webpage:	www.math.rice.edu/∼klm1		
TA:	Landon Jennings	**TA Office Hours:**	Tuesday 3-4:30
TA office:	HB 40 (basement)	**TA Email:**	landon@math.rice.edu

Text: Elementary Number Theory, David M. Burton, 6th Edition.

Course Overview: "Number theory" is the term for the branch of pure mathematics concerned with studying the properties the integers along with their applications to other problems. This classical subject is one of the oldest branches of mathematics, dating back at least to the time of Pythagoras, around 500 B.C. The purpose of this course is to learn the fundamental concepts of the theory of numbers. We will begin by studying prime numbers, divisibility and the theory of congruences. From there the course will apply these fundamental number theoretic concepts to studying further number theoretic functions and laws. Since computers play an important role in the modern study of number theory, we will also experiment with a few computational problems that will only be feasible (in a practical amount of time that is) using a computer.

Homework: Homework will be assigned weekly and will not be pledged. You may work together on homework assignments, but write up your own solutions and beware of depending too much on your peers.

Homework will be graded for correctness, clarity, and justification. Homework will play two pivotal roles in this class. First, some problems will be of a computational manner (both on the computer and pen and paper). These problems will solidify your understanding of the more theoretical concepts we study in class. Second, some problems will ask you to prove a statement. These problems will utilize your proof writing skills and allow you to study theory beyond that presented in class.

Exams: There will be two midterms during the semester, one in early October and one in mid November. The exact dates will be announced in class. There is also a final exam which is yet to be scheduled. If you have a legitimate schedule conflict with an exam let me know as early as possible, so we can try to make arrangements. You will be responsible for any material we cover in class.

Concerning the final: It is the policy of the mathematics department that no final may be given early to accommodate student travel plans. We will not know when the final in this course will be scheduled for some time. Therefore, if you should make plans to travel before the end of final exam period, and it turns out that the final for this course is after your scheduled departure date, you will have to choose between keeping your plans and receiving a zero for the final, or incurring the costs for changing your plans and taking the final at its scheduled time. Thanks for your understanding.

Grades: Your grade in the class will be based on the following weights:

Homework	30%
Exams	20% each = 40% total
Final	30%

Your lowest homework score will be dropped.

Disability Support: It is the policy of Rice University, as well as this instructor, that any student with a disability receive fair and equal treatment in this course. If you have a documented disability that requires academic adjustments or accommodations, please speak with me during the first two weeks of class. All discussions will remain confidential. Students with disabilities will also need to contact Disability Support Services in the Ley Student Center.