Course information


Instructor information

Name: Dr. Aaron Greicius.
Office: Loyola Hall 213.
Office Hours: M 4-5, Tu 10-12:30, and by appointment.
Email: greicius@math.luc.edu.

Course website

A course website will be maintained on Blackboard: https://blackboard.luc.edu. There you will find, among other things, announcements, a course calendar, and course documents. I will also post some info on my personal website: http://math.luc.edu/~greicius

Important dates

| Last day to drop with 100% Bursar credit | Sep 9 |
| Last day to drop with 50% Bursar credit | Sep 23 |
| Last day to withdraw | Nov 2 |

Course content

This bridge course serves as an introduction both to number theory in particular, and to the art of mathematical argument in general. In exploring fundamental properties of integers and rational numbers, students will learn how to understand and write mathematical proofs. Topics will include properties of integers, integer representations, prime numbers and greatest common divisors, congruences, multiplicative functions, and primitive roots for primes.

Course approach

Both sections of Math 201 this semester will be run as “flipped” courses: instead of listening in class to lectures and working problems at home, students will instead digest lecture material (video lectures, lecture notes, textbook) at home and use class time to work problems. Stephen Doty and I will be working closely together in designing and implementing this method. We wish to convey that mathematics is above all a way of thinking, an activity; and like all activities, to become good at it one needs to train. Consider us as your personal trainers.

Grading

The course grade will be based on classwork, an in-class midterm exam, and the final, and will be weighted as follows:

20% (In-class homework) + 25% (Presentation and writeup) + 25% (Midterm) + 30% (Final).

The various components of your total grade are described below. Curving will be used to convert your final numeric grade to a letter grade.
**CLASSWORK**

In-class homework (20%) and presentation/writeup (25%) make up the classwork component of the grade.

*In-class homework.* Homework will be assigned for each lecture day. These problems will be presented and graded in class, and must be fully and neatly written up before the beginning of class.

*Presentation.* Each student will have to present solutions to at least 4 of these in-class homework problems.

*Writeup.* In addition to the in-class homework, there will be a weekly homework assigned consisting of one or more problems. These problems are to be carefully typed up and submitted to me as PDF documents via email. Students are strongly encouraged to write these solutions using the document preparation system \LaTeX and will be provided with many resources to help them get started with this.

*General comments about homework.* I will not accept late homework. Your answers will most often consist of arguments and should be written in complete sentences, with an eye toward good style and persuasiveness. The answers in the back of the book and my own solutions will serve as good models of what your homework should look like.

**EXAMS**

All exams are closed-book, and calculators will not be allowed.

*Midterm.* The midterm is tentatively scheduled for Wednesday, October 17. It will be 50 minutes long.

*Final.* The final is scheduled for Friday, December 13, 9-11, and will take place in our normal classroom.

**MAKE-UP EXAMS**

It is department policy that make-up exams be given only for genuine, verifiable causes such as serious illness, death of an immediate family member, or a special, university sponsored event. If you believe you have a valid excuse for missing an exam, you should get in contact with me as far in advance as possible and be prepared to document your case.

**TUTORING CENTER**

The Center for Tutoring and Academic Excellence offers tutoring for small groups as well as a Tutor-lead Study Hall. To learn more or request tutoring services, visit the Center online at www.luc.edu/tutoring.

**ACADEMIC INTEGRITY**

As outlined in the Academic Standards and Regulations web page, all work must be your own. Cheating may result in a grade of “F” and notification of the appropriate dean. Cheating during quizzes, midterms, and the final includes, but is not limited to: copying another person’s work, allowing another person to copy your work, etc. Cheating on homework includes but is not limited to the submission of material copied from a published source: print, internet, CD-ROM, audio, video, etc.