Math 440/540: Computational Number Theory

Fall Term 2015
M, W, F 3:00 – 3:50 PM
Wilkinson Hall (WLKN) 231

Instructor: T. Schmidt
Office: Kidder Hall 294C
Telephone: 737-5180
E-mail: schmidt@math.orst.edu
Office Hrs: T 10:30-11:50, F 14:00-14:50; F in MLC
and by appointment
On-line info: http://oregonstate.edu/~schmidtt

Text: V. Shoup, A computational introduction to
Number Theory and Algebra, 2nd ed.

Test dates: Midterm 1: Fri, Oct 23
Midterm 2: Fri, Nov 13
There will be no make up exams in this class

Project Due Date: Monday Dec 7th, by 5 PM.

Academic Honesty: Group work is permissible on homework assignments. However, all such work must be acknowledged. No group work is permissible on any examination.

Grades mth440: The two Midterm examinations will each account for 20% of the grade. The homework will account for 25% of the grade. A project, to be approved in the fifth week and due by 5 PM on Monday of Finals week, will account for 30%. The remaining 5% will be accounted for by class participation.

Grades mth540: The two Midterm examinations will each account for 10% of the grade. The homework will account for 45% of the grade. A project, to be approved in the fifth week and due by 5 PM on Monday of Finals week, will account for 30%. The remaining 5% will be accounted for by class participation. 540 students will be responsible for more theoretical aspects of the material than the 440 students.

Content: This course is an introduction to elementary number theory, with some applications. We will use the computer algebra system Sage in our explorations. Questions in number theory have been posed for thousands of years, there continues to be advances. We will get some idea of the history and excitement of this area of mathematics, as well as see some of its applications.
The project can be time consuming — please schedule your term appropriately.

Statement Regarding Students with Disabilities

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. [Given the change in instructor in our class, this means by the beginning of week 6.] Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Statement Regarding Academic Honesty and Student Conduct

Students are expected to be familiar with Oregon State University’s Statement of Expectations for Student Conduct. Please review this statement at the following web link: http://oregonstate.edu/admin/stucon/achon.htm