Course: Mathematics 8011.001.

Course Title: Abstract Algebra I.

Time: TR 11:00-12:20.

Place: Wachman Hall 617.

Instructor: Martin W. Lorenz.

Instructor Office: Wachman Hall 528.

Instructor Email: martin.lorenz@temple.edu

Instructor Phone: 215-204-5013.

Office Hours: T 2-3 or by appointment.

Prerequisites: Math 3098 or equivalent or permission of instructor.


Course Goals: This course, the first part of a two-semester sequence, gives an introduction to the terminology and methods of modern abstract algebra.

Topics Covered: The material to be covered in this semester is roughly organized into three main parts: Groups (Chapters 1-6 of the textbook), Rings and Modules (Chapters 7-11), and Fields (Chapter 13). The indicated chapters contain far too much material to be completely covered in the first semester; so a selection will be made.

Course Grading: The course grade will be based on two exams and on homework. The final exam will count for 40% of your grade; the midterm exam and the total score from all homeworks will each count as 30% of your grade.

Exam Dates: There will be two exams: a Midterm Exam on Thursday, Oct. 18, 10:30-12:30 [time to be confirmed] and a comprehensive Final Exam on Tuesday, Dec. 18, 10:30-12:30. Both exams will be given in the regular class room, Wachman 617.

Attendance Policy: Attendance will not be monitored, but it is in your own best interest to attend class regularly and to take complete class notes.

Homework: Homework will be assigned and collected approximately weekly. You may work together on the assignments, but I expect everybody to write up their own solutions -- the writing component is an essential part of this course. Ideally, homework should be handed in by email as a pdf file that has been created with TeX.

Computer Algebra: I plan to occasionally refer to certain computer algebra systems during the semester. As a start, I recommend that you install SageMath on your computer. The system is freely available here: http://www.sagemath.org.

Optional Labs: If there is interest, I would be willing to run informal lab sessions on a somewhat regular basis. These could serve to fill in some gaps in your background knowledge, to clarify certain points of my lectures, . . . The time and location of these sessions is to be determined.

Any student who has a need for accommodation based on the impact of a disability should contact me privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at (215) 204-1280, 100 Ritter Annex, to coordinate reasonable accommodations for students with documented disabilities.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed here. Students will be charged for a course unless dropped by the Drop/Add deadline date. Check the University calendar for exact dates.

During the Drop/Add period, students may drop a course with no record of the class appearing on their transcript. Students are not financially responsible for any courses dropped during this period. In the following weeks prior to or on the withdrawal date students may withdraw from a course with the grade of "W" appearing on their transcript. After the withdrawal date students may not withdraw from courses. Check the University Calendar (Opens in new tab/window) for exact dates. See the full policy by clicking here. (Opens in new tab/window)