

Meeting times: MWF 9:15-10:20

Room: MCLT 214

Professor: Tom Edgar

Office: MCLT 256

Phone: 538-6198

email: edgartj@plu.edu

Office Hours: MWF 10:30-12:00; W 2:00-3:00, by appointment, or drop by my office any time I am available.

Webpage: www.plu.edu/~edgartj

The website will be done in a wiki and blog format. All announcements, homework assignments, solutions, exam guides, and syllabus changes will be posted on the wiki and blog. You are responsible for checking the wiki or blog regularly, and I recommend using the RSS feature to do so. If you have questions about this, please ask. Additionally, you will be required to help build certain parts of the wiki; this will be discussed at a later date. I also hope the wiki will become a forum to discuss interesting questions and problems from this class.

Textbook: *A First Course in Abstract Algebra*, by John Fraleigh

The book is required for the course, and most of the homework assignments will come directly from the book. The book is available for purchase at the Garfield Book Company or online. We will cover most of chapters 0-3 and possibly some from chapters 4 and 7 if time permits.

Technology: Sometimes we may use computers in class. Please do not use any other technology during class hours (this includes, but is not limited to, cell phones, iPods, and other hand-held devices). I reserve the right to confiscate any devices not used for the class.

Objectives

This course will provide a nice avenue in which to practice reading, writing and understanding proofs. We will learn about numerous “algebraic systems” that are similar to standard number systems that you have studied thus far in your mathematical career. We hope to unlock much of the beauty in axiomatic systems, symmetry, and number systems. Our main topical goal is to understand the basic ideas of group theory. We hope to introduce many of the ideas in historical context as well.

Grades

Grades will be assigned at the end of the semester distributed in the following way:

Three Exams	60%
Homework	20%
Adopt-a-Group Project	10%
Wiki Definitions and Quizzes	10%

Exams

There will be three take-home exams. You may not collaborate with other students on the exams. You may only consult your notes, the text for the course, and me to complete the exam. You have five days to complete each exam. The dates for the three exams are as follows:

Friday, October 1 - Wednesday, October 6
 Friday, November 5 - Wednesday, November 10
 Friday, December 10 - Wednesday, December 15

Each exam will be worth 20% of your final grade. The exams will be due by 5:00 pm on the corresponding date, and late exams will not be accepted under any circumstances.

The final exam, according to the registrar, is scheduled for **Tuesday, December 14** from **8:00-9:50 am**; even though the exam is a take-home, I require attendance on this date, and will be willing to offer brief help on the final exam during this time.

Homework and Reading

Homework will be assigned daily and will be due by 5:00 pm on the assigned day. Homework should be written neatly and stapled if necessary. I will not accept late homework except under extreme circumstances. I strongly encourage you to collaborate on your homework; however, it is an honor-code violation to simply copy another student's work. If you collaborate, I require that each student hands in his or her own homework. Homework will be graded on clarity and correctness with varying levels of partial credit. Homework will consist of three different types of problems: computations, concepts, and theory. Theory problems will be worth the most, and you will have the opportunity to rewrite one theory problem per homework to get more points. Feel free to stop by to discuss your proofs.

Activities, Quizzes and Reading

Periodically throughout the semester we will have group activities and individual quizzes. Group activities will usually cover material we have not discussed and will not be collected. Many nights, I will assign a short (one section) reading assignment. Individual quizzes will be based on your reading of the material and will usually involve basic computations and statements of definitions and theorems.

Adopt-a-Group and Wiki Definitions

Each of you will be given the chance to “adopt” your own group structure. Throughout the semester, I will ask you to determine certain properties about your group and add these to the course wiki. We will discuss this project in more detail later in the semester. I will provide lots of feedback for this project. Also, the wiki will contain a list of important terms from the course. I will require the class to fill in the corresponding definitions as we move through the course. I will hand out the grading rubric for both of these wiki projects.

Class Attendance

Attendance is mandatory for success in a math class. I hope that you will make it to class every day. I will not formally take attendance. However, this class is small, and I will realize if you are missing too many classes. Additionally, it has been my experience that students who come to my classes tend to do well on exams and homeworks; whereas, students who miss do poorly. Please let me know ahead of time if you have a valid excuse for missing a class, and I will do what I can do to help you get caught up.

Participation and Feedback

I enjoy active participation in class: helping me through problems, asking questions, correcting me when necessary, and volunteering to present. I hope that you feel comfortable enough to ask any questions you have during the lectures. Always let me know if you are confused with what I am doing or how I am presenting the material. I cannot remedy the situation if you do not let me know that something is wrong.

Success in this Class

It is common to have a “me vs. the professor” attitude in a class. I want you to know that I am here to help you succeed, and I want you to succeed. You will need to read the textbook, keep up with homework, and ask lots of questions. I am here as a guide to get everyone to their destination. If we work together, we can all succeed in this class. Finally, remember that doing mathematics is learning mathematics, and so you must continue to push through tough problems. If you have a medically recognized disability, please contact the Office of Disability Support Services (x7206) as soon as possible.

Academic Dishonesty

PLU has an expectation that students will not cheat or plagiarize. Academic misconduct will not be treated lightly. Please do all of your own work (even when collaborating with others on homework) and do not consult any sources other than those allowed on exams. For questions about academic integrity, consult <http://www.plu.edu/academics/integ.html>.

Please contact me with any other questions. I reserve the right to change this syllabus at any time throughout the semester. Please see the wiki/blog for changes.