

Instructor: Michael Pelsmajer (pelsmajer@iit.edu)

Contact me by email. I will also email you, so you need to check your hawk.iit.edu email frequently. (Really, you should set up your emails so that they all go to one account.)

Office Hours: *Flexible*. To arrange a meeting, talk to me before or after class, or send an e-mail with a list of convenient times. (You can also just stop by, and if I'm not too busy, I'm happy to talk.)

Office: Engineering 1 Building, Room 206 (312.567.5344 but email is usually better)

Required text: Contemporary Abstract Algebra, Joseph A. Gallian, 7th or 8th edition. This book is exceptionally well-written and you should read it. Read lecture material before and/or after the lecture.

Syllabus: Rings and fields and applications. Chapters 12-23, 27, 28, 32 (as time allows).

Class meetings: Attendance is required, and you should come to class ready to learn. Awake and alert, of course, but it's also astonishingly helpful to read material before the lecture. I'm not suggesting that you need to figure out everything on your own—this is not an independent study course. Rather...

How to read material before a lecture: Read all definitions, theorem statements, examples, and discussions. Give the proofs a shot, too. You should attempt to understand everything, until you either succeed or until you get stuck in a confusing point. You may realize that you need to review something from an earlier class: if so, do that. Finally, think a bit about the big picture and try to decide what is most important.

Now you are ready for class.

Hours & Location: Mondays and Wednesdays 1:50pm-3:05pm in Engineering 1 Building Room 122

Homework: Assignments will be posted on the class web page and/or given during class. You should do *all* the problems. Not all of them have to be written up and handed in (for various reasons: too easy, too tedious to write nicely, odd-numbered) but all of them are equally important.

Homework is not an exam; it is part of the learning process. You can work together with your classmates—in fact, I encourage you to do so! Odd-numbered problems have answers or hints in the back of the book; you can look at them. You can seek me out for help, in person or by email. (Emails should be clear and give all necessary details.)

Nicely written problems will be collected at the beginning of class each Wednesday (starting the second week of class). While you can discuss solutions with your classmates, when you are writing up your solutions, you must work alone. On the front page, write your name, the date, “Math 431 (Pelsmajer)”, and write a list of everyone that you worked with. (Good mathematicians generously give credit to their colleagues for their help, and you should too.)

Quizzes: Some Wednesdays there will be a short quiz, which will be identical to a recent homework problem.

Exams: Two mid-terms and a final exam.

Grading Scheme: 20% homework, 8% quizzes, 24% each exam.

Course web page: <http://math.iit.edu/~pelsmajer/Math431-Spring2013.htm> for more information.

Finally: Read Gallian's “ADVICE FOR STUDENTS FOR LEARNING ABSTRACT ALGEBRA” again. You'll actually get more out of it now, after having completed one semester of abstract algebra.

<http://www.d.umn.edu/~jgallian/advice.html>

Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources. The Center for Disability Resources (CDR) is located in 3424 S. State St., room 1C3-2 (on the first floor) in Life Sciences Room 218, telephone 312-567-5744 or disabilities@iit.edu.