Course Guidelines

Dr. R. Beezer

Math 434A

Spring 2010

Text We will be using *Abstract Algebra: Theory and Applications*, by Thomas W. Judson as our textbook. We will cover material from the Chapters 14 through 21.

Home Page Start at http://buzzard.ups.edu/courses.html to locate the WWW page for this course.

Office Hours My office is in Thompson 303; the telephone number is 879–3564. Making appointments or simple, non-mathematical questions can be handled via electronic mail — my address is beezer@ups.edu. Office Hours are 10:00-10:50 on Monday and Friday, and 9:30-11:50 on Tuesday and Thursday. You may make an appointment for other times, or just drop by my office. Office hours are your opportunity to receive extra help or clarification on material from class, or to discuss any other aspect of the course.

Homework Homework will be assigned for each chapter, but will not be collected. Of course, you are not limited to working *just* these assigned problems. Once per chapter we will have a problem session where we can discuss these problems. It is your responsibility to be certain that you are learning from the homework exercises. The best ways to do this are to work the problems diligently when assigned and to participate in the classroom discussion. If at this point you are still unsure about a problem, then a visit to my office is in order. Making a consistent effort outside of the classroom is the easiest way to do well in this course.

Mathematics not only demands straight thinking, it grants the student the satisfaction of knowing when he [or she] is thinking straight.

— D. Jackson

Mathematics is not a spectator sport.

— Anonymous

I hear, I forget.
I see, I remember.

I do, I understand.

— Chinese Proverb

An education is not received. It is achieved.

— Anonymous

Reading Questions Reading questions will be posted on the course WWW page, along with careful directions about submitting your responses. These are due to me by midnight the evening before we begin discussing a new chapter. These should be submitted to the email address announced in class, not my beezer@ups.edu address.

Sage Exercises For each chapter there will be an assigned exercise to work in Sage. These will be due on the day of the problem session preceding the quiz on that chapter, as a Sage worksheet attached to an email sent to the same address as for reading questions.

Exams There will be four one-hour exams — see the attached sheet for (very) tentative dates — at the conclusion of each two chapters. The lowest of your exam scores will be dropped. The comprehensive final exam will be given at 8 AM on Monday, May 10. The final exam cannot be given at any other time, so be certain that you do not make any travel plans that conflict, and also be aware that I will allow you to work longer on the final exam than just the two-hour scheduled block of time.

Projects Each student will give research a topic related to the course and use this as the subject of a paper and an in-class presentation. Details will be provided separately early in the semester.

Grades Grades will be based on the following breakdown: Reading Questions — 5%; Sage Exercises — 10%; Project — 15%; Exams — 45%; Final — 25%. Homework, attendance and improvement will be considered for borderline grades. Scores will be posted anonymously on the World Wide Web at http://buzzard.ups.edu/courses.html.

Reminders Here are three reminders about university policies contained in the *Academic Handbook*. These are described thoroughly online, or a printed copy may be requested from the Registrar's Office (basement of Jones Hall). See http://www.pugetsound.edu

/student-life/student-resources/student-handbook/academic-handbook/

"Regular class attendance is expected of all students. When non-attendance is in the instructors judgment excessive, the instructor may levy a grade penalty or may direct the Registrar to drop the student from the course." (Registration for Courses of Instruction section)

Withdrawal grades are often misunderstood. A Withdrawal grade (W) can only be given during the third through sixth weeks of the semester, after that time (barring unusual circumstances), the appropriate grade is a Withdrawal Failing (WF), even if your work has been of passing quality. See the attached schedule for the last day to drop with an automatic 'W'. (Grade Information and Policy section)

All of your graded work is expected to be entirely your own work. Anything to the contrary is a violation of the university's comprehensive policy on Academic Honesty (cheating and plagiarism). Discovered incidents will be handled strictly, in accordance with this policy. Penalties can include failing the course and range up to being expelled from the university. (Academic Integrity section)

Attendance Daily attendance is required, expected, and overall a pretty good idea.

Purpose At this point in your college career, you should be well on your way to being an independent scholar, who appreciates the beauty of mathematics and understands the effort needed to master new and difficult ideas. Consistent with that, I will be giving you a fair degree of freedom to learn this material in a manner that suits you.

Read the book before the lectures, work the exercises diligently, tidy up your class notes each evening, and ask questions. Arriving late to class, or having conversations with others during class, not only disrupts your peers, but tells me you are not serious about your education. I will not routinely check attendance, but our class is small enough that I will notice when you are not here, and again this will be another way that you signal me about your commitment to the endeavor.

We will build upon, and extend, the basic ideas of algebra that we studied for groups last semester. At the end of this term you should be familiar with many new algebraic structures, and be able to readily understand new ones you will encounter later. We will also encounter some surprising applications. The investment of your time and energy applied will be amply repaid by a full understanding of the deeper ideas of algebra.

Tentative Daily Schedule

Monday	Tuesday	Thursday	Friday
Jan 18 MLK Day	Jan 19	Jan 21	Jan 22
Jan 25	Jan 26	Jan 28	Jan 29
Feb 1	Feb 2	Feb 4	Feb 5
Feb 8	Feb 9 Exam Chapters 14, 15	Feb 11	Feb 12
Feb 15	Feb 16	Feb 18	Feb 19
Feb 22	Feb 23	Feb 25	Feb 26
Mar 1 Last day to drop	Mar 2	Mar 4 Exam Chapters 16, 17	Mar 5
Mar 8	Mar 9	Mar 11	Mar 12

Monday	Tuesday	Thursday	Friday
Mar 22	Mar 23	Mar 25	Mar 26
Mar 29	Mar 30	Apr 1	Apr 2 Exam Chapters 18, 19
Apr 5	Apr 6	Apr 8	Apr 9
Apr 12	Apr 13	Apr 15	Apr 16
Apr 19	Apr 20	Apr 22	Apr 23
Apr 26 Exam Chapters 20, 21	Apr 27 Presentations	Apr 29 Presentations	Apr 30 Presentations
May 3 Presentations	May 4 Presentations		

Final Examination Monday, May 10, 8 AM