

**Instructor** : Aaron Montgomery

**Class** : MT $\Theta$ F @ 9–9:50 in Bouillon 116

**Office Hours** : M @ 12, T @ 11,  $\Theta$ F @ 10, and by appt.

**Email** : montgoaa@cwu.edu    **Phone** : 963-1906

**Text** : Fraleigh's *A First Course In Abstract Algebra*, 7th ed

**Web** : <http://webwork.math.cwu.edu/~montgomery/191/462/>

**Textbooks:** In addition to the required text, you can find some information about general proof writing in the first three Chapters of my MATH 351 packet available at my MATH 351 website <http://webwork.math.cwu.edu/~montgomery/181/351/>.

**Course Outcomes:** This course will introduce the basic concepts of abstract algebra. In particular, we will study rings, subrings, ideals, and ring homomorphisms. This material is presented in the Chapters 4 and 5 of Fraleigh's text. In addition, we may approach topics like homology as time allows.

### Graded Coursework

*Homework: 160 Points* — There will be 8 homework assignments (all assignments are posted on the website), each worth 20 points for a total of 160 points. After getting your homework returned, you will have one week during which you can attempt to rework **boldface** problems you missed for reduced credit. Late homework is not accepted. Homework turned in one week after the due date will be graded with the reworked problems and will be assigned reduced credit. I will post solutions one week after the due date. At least six of your homework assignments must be turned in physically to me or my mailbox in the Math Department. You may turn in up to one (1) homework electronically (to allow for the possibility that you cannot make it on to campus that week).

Much of your homework involves writing proofs (those problems are listed in boldface on the website). I expect proofs to be complete and follow the guidelines in the MATH 351 packet. Minimal points will be given for homework that requires me to rotate the page, squint to make out the words, or fill in missing boilerplate. I'm not going to spend my time doing the easy parts of your assignment for you. If you expect a good grade, you are going

to need to at least make the effort to do the easy parts yourself.

You may work on homework with other students in the class, however, you must turn in your own copy of the homework.

*Presentations: 50 Points* —

You will be expected to give weekly presentations. You will be graded primarily on effort and participation, so if you have well prepared notes for your presentation, you should expect to receive these points.

*Exams: 90 Points* —

There will be two exams. A midterm (see website for date) and a cumulative final exam (see CWU's standard final schedule for date and time). Exams will be in-class and will require you to be able to write proofs. The midterm will be worth 40 points and the final exam worth 50 points.

*Final Grades: 300 Points* —

|            |    |  |            |   |  |            |    |
|------------|----|--|------------|---|--|------------|----|
| $\geq 261$ | B+ |  | $\geq 279$ | A |  | $\geq 270$ | A- |
| $\geq 231$ | C+ |  | $\geq 249$ | B |  | $\geq 240$ | B- |
| $\geq 201$ | D+ |  | $\geq 219$ | C |  | $\geq 210$ | C- |
|            |    |  | $\geq 189$ | D |  | $\geq 180$ | D- |

### Accommodations

Central Washington University is committed to creating a learning environment that meets the needs of its diverse student body. Students with disabilities should contact Disability Services to discuss a range of options to removing barriers, including accommodations. Disability Services is located in Hogue 126. Call (509) 963-2214 or email [ds@cwu.edu](mailto:ds@cwu.edu) for more information.