

**Instructor** : Aaron Montgomery

**Class** : MTWR @ 2 in Hertz 104

**Office Hours** : M–R @ 9, TR @ noon in Bouillon 107F

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

**Text** : None required

**Web** : <http://webwork.math.cwu.edu/~montgomery/171/351/>

### **Textbooks:**

There is no text for this course. I will provide notes in the form of handouts and post links to resources on the website. You can also scour the internet for information about this topic. However, for most of the problems I will assign, if you are scouring the internet for help, you are doing them wrong.

### **Course Outcomes:**

This course (and MATH 335) are designed to develop your proof writing skills so that you will be prepared for later courses (the Abstract Algebra and the Analysis sequences in particular). In order to pass this course, you will need to be able to independently set up proofs and to be able to fully develop proofs that fit into the “follow your nose” pattern. While you will be introduced to some basic point-set topology (such as connectedness, compactness, and the separation properties), the primary goal will be writing proofs within an axiomatic system.

### **Graded Coursework:**

You may work on homework with other students in the class, however, you must turn in your own copy of the homework. After getting your homework returned, you will have one week during which you can attempt to rework problems you missed for reduced credit. Homework is designed to prepare you for the exams. Homework will be worth 45% of your final grade.

During the course of the quarter, you will be required to present at least one (possibly two) proofs to the class. These proofs will have been from previous homework assignments that you have completed. The goal is to try to increase your comfort level presenting material to a (small) group of your peers. In addition to the presentation, you will be expected to provide an

electronic copy of your proof written in  $\text{\LaTeX}$ . You will not be able to receive a grade higher than a B+ if you do not do at least one presentation in front of the class. Your presentations will be worth 10% of your final grade.

Exams will have both an in-class component and an out-of-class component and are to be completed individually. You will be expected to provide an electronic copy of some exam problems. Exams will be worth 45% of your final grade.

There will be a link to a latex style file on the website. You are expected to use the notation provided in that style file when submitting your electronic copies.

$\geq 87\%$	B+		$\geq 93\%$	A		$\geq 90\%$	A-
$\geq 77\%$	C+		$\geq 83\%$	B		$\geq 80\%$	B-
$\geq 67\%$	D+		$\geq 73\%$	C		$\geq 70\%$	C-
			$\geq 63\%$	D		$\geq 60\%$	D-

### Accommodations

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