Math 235 Syllabus – Spring 2024

Instructor Information

Michael Moy Email: michael.moy@colostate.edu Office hours: TBD

Class Time and Location

Tuesdays and Thursdays 2:00-2:50pm Weber 223

Course Objectives

The purpose of this course is to introduce students to mathematical proofs and to foundational concepts used throughout mathematics. This course will differ from many earlier courses in students' math education, in that it will be more theoretical and focused on presenting mathematical reasoning rather than on computation. Students will read and write proofs and learn standard proof techniques. The course will give an introduction to set theory, number systems, functions, and logic, with examples drawn from various areas of math.

Textbook

The textbook for the course will be *Book of Proof*, Third Edition by Richard Hammack. It is available for free online at https://www.people.vcu.edu/%7Erhammack/BookOfProof/. Any other course materials will be made available on Canvas.

Assessments

Homework

Homework will be assigned roughly once a week and **due Tuesdays**. It will be submitted either electronically on Canvas or as a hard copy in class. Students are encouraged to work together, but solutions should be written in a student's own words and each student's work submitted must be their own.

Exam and Final Project

There will be one midterm exam, tentatively scheduled for **February 29**, and a final project. The final project will be assigned in the middle of the semester and will likely consist of examples of proofs from throughout the semester and/or proof-based writing about a mathematical topic of interest to the student.

Grading

Grading will be based on homework, the midterm exam and the final project, with the percentage grade in the course weighted as follows:

Homework: 60% Exam: 20% Final Project: 20%

Final letter grades will be assigned based on the final percentage grade, with cutoffs no stricter than the standard 90% for A-, 80% for B-, etc.

Accommodations

Students needing any sort of accommodations for this course must be in touch with the Student Disability Center (https://disabilitycenter.colostate.edu/) and inform the instructor early in the semester.

Academic Integrity

The course will adhere to the Academic Integrity Policy of the Colorado State University General Catalog and the Student Conduct Code (https://resolutioncenter.colostate.edu/wp-content/uploads/ sites/58/2023/08/2023-Student-Conduct-Code-SRC.pdf). For homework, students are encouraged to work together, but solutions should be written in a student's own words and each student's work submitted must be their own. Exams must be completed individually and without unauthorized resources. Further information can be found at https://tilt.colostate.edu/integrity/studentresources/.