Math 1015: Mathematics: An Exploration Spring 2022

Section 1: TWF 11-11:50, Bannow 139

Section 2: TF 12:30-1:20, W 1:00-1:50, McAuliffe 102

Instructor Chris Staecker

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Office Hours: TWF 10-11, TF 12-12:30, W 12-1, 2-3.

All office hours are on zoom: https://fairfield.zoom.us/j/5514910533

Final Exam Section 1: Tuesday May 10, 11:30 AM

Section 2: Friday May 6, 11:30 AM

Course Website http://faculty.fairfield.edu/cstaecker/courses/2022s1015/



Course Description

This course introduces various ideas in mathematics at an elementary level. It is meant for the student who would like to fulfill a core mathematics requirement, but who does not need to take mathematics for her or his major. Topics will vary, depending upon the instructor, but in general will include topics of both historical and current interest.

Rough calendar

January/February Voting & Gerrymandering

Feb 25 Exam #1

February/March Gerrymandering & Graph theory

April 1 Exam #2

April More graph theory May 6 & 10 Exam #3 (final exam)

Exams

According to the rough calendar, there will be exams in class on Friday February 25 and Friday April 1. These dates may change. Each exam, including the "final exam", covers only the topics that it follows. No exam is cumulative.

Your exam grade for the semester is a simple average of the three exams. The final exam is not worth more than the in-class exams.

Students will not use calculators or any other electronic gadgetry during exams.

Homework

Homework will be assigned each week. Assignments will be posted at the course website. Students are encouraged to work together on assignments, but each must hand in their own papers.

Homework will be due each Wednesday night at 11:59PM, with assignments covering the material from the previous week. All assignments will be handed in electronically at Gradescope.

Quizzes

Each Friday, a short quiz will be given, covering the same material as the homework. Quiz questions will be similar to the questions on the homework. Missed quizzes will only be excused for good reasons.

Students will not use calculators or any other electronic gadgetry during quizzes.

Grading: Choose your own ratios

Your course grade will be inspired by an average, with the lowest quiz and homework scores dropped. The grading is in three categories, and each student will choose their own ratios for the grades.

Homework ??% Quizzes ??% Exams ??%

Sometime on or before February 4, each student must email the professor with their preferred grade ratios. Choose a percentage for each category. The rules are:

- The three percentages must add to 100%
- Each of the three categories must be at least 30%
- You can't change your mind later!

If you never notify me, you will default to exactly 33% for each category.

Online submission

No assignments, quizzes, or tests will be submitted on paper. All work will be submitted online at Grade-scope.com. Students will take phone pictures of their work and submit it to Gradescope.

Should I show work?

The professor already knows the answers to the problems which are assigned, so you do not need to tell him the answer. You need to demonstrate that you know how to derive the answer. Credit will not usually be given for answers which are given with no rationale or work shown.

Attendance

Attendance does not directly figure into your grade, so there is no penalty for missing class. Students who miss class are 100% responsible for making sure all assignments are still completed on schedule. Specifically, the professor expects homework assignments to be handed in on (or before) their due dates, and it is the student's responsibility to negotiate missed quizzes immediately. The professor is happy to negotiate in case there are good reasons, but these negotiations must be initiated by the student.

Office hours

The Professor regards visits to office hours as part of the instruction for this course. Responsible students in this course are expected to visit the Professor occasionally for help with homework and other class material. Class assignments are meant to stretch the abilities of the students, and the Professor expects even the best students to benefit from individual discussion. Students are encouraged to come in small groups if they don't want to come alone.

Counseling services

Fairfield University provides mental health services to support the academic and personal success and well-being of students. Counseling & Psychological Services offers confidential psychological services to help students manage personal challenges that may interfere with your well-being. Counseling & Psychological Services is free for full-time undergraduate students.

For help, contact Counseling and Psychological Services at (203) 254-4000 ext 2146.