# MATH 301 Syllabus

## **Instructor Information:**

• Name: Joseph Pappe

ullet Email: jpappe@colostate.edu

• Tentative Office Hours: M 4-5pm and R 3-4pm in Weber 119

# Prerequisite:

A passing grade in Math 161 or an equivalent course.

## Textbooks:

The primary textbook for this course is *Counting Rocks! An Introduction to Combinatorics* by Adams, Emmrich, Gillespie, Golden, and Pries which can be found at https://arxiv.org/abs/2108.04902.

The following are secondary textbooks which can be accessed for free through the library.

- Discrete Mathematics: Elementary and Beyond, 1st Edition by Lovasz, Pelikan, and Vesztergombi
- Combinatorics and Graph Theory by Harris, Hirst, and Mossinghoff

# Grading Scheme:

- Participation 10%
- Homework 30%
- Midterm 1 15%
- Midterm 2 15%
- Final 30%

# Participation:

Part of lectures will consist of working on problems and discussing them with others. Participation will consist of sharing ideas and solutions to the problems with the whole class. To obtain full participation credit, you must present at least two problems.

#### Homework:

There will be a total of 12 homework assignments with the lowest two homeworks being dropped. Homework will be due each Monday at 11:59 pm with the exception of Labor Day (homework will be due that Wednesday instead) and the weeks after the midterms. Homework should be turned in via Gradescope which can be accessed through Canvas. NO LATE HOMEWORK WILL BE ACCEPTED. Collaboration on homework is allowed and in fact encouraged, but you MUST write your own solutions.

#### Midterms:

There will be two 50-minute midterms in this class. The midterms are scheduled for **September 29th** and **November 10th** in class. There will be NO make up exams.

# Final:

The final will be a 120-minute exam given on **December 13th**, 11:50 - 1:50pm. The final WILL be cumulative. Again, there will be NO make up exam.

## **Important Dates:**

- August 27th: Last day to add the class without override
- September 6th: Last day to add the class with override, drop the class, or change the grading mode

## Class Environment

Be respectful and supportive of others. No one knows all the answers, and everyone has something to offer. Mistakes happen, and we should not let them get in the way of sharing ideas or asking questions!

#### Student Accommodations

Any student with a documented disability who needs to arrange reasonable accommodations must contact the Student Disability Center (SDC). I will only provide special accommodations requested by the SDC. If you have any questions, please contact the SDC at (970)491-6385 or sdc\_csu@colostate.edu.

## Disclaimer:

I reserve the right to make changes to the syllabus during the course of the class.

# Tentative Schedule:

Week	Monday	Wednesday	Friday
Aug 21, 23, 25	1.1-1.2	1.2	1.3 - 1.4
Aug 28, 30, Sep 1	2.1-2.4 (HW 1 due)	2.5	2.5-2.6
Sep 4, 6, 8	Holiday	2.7 (HW 2 due)	2.8-2.9
Sep 11, 13, 15	3.1-3.2 (HW 3 due)	3.3-3.4	3.5
Sep 18, 20, 22	4.1 and 4.3 (HW 4 due)	4.2 and 4.4	4.5-4.6
Sep 25, 27, 29	5.1-5.2 (HW 5 due)	5.2 and Review	Midterm 1
Oct 2, 4, 6	5.3-5.4	5.5-5.6	5.6 and 6.1
Oct 9, 11, 13	6.1-6.2 (HW 6 due)	6.3-6.4	6.5-6.6
Oct 16, 18, 20	6.6 (HW 7 due)	7.1	7.2-7.3
Oct 23, 25, 27	7.3 (HW 8 due)	7.4	7.5-7.6
Oct 30, Nov 1, 3	8.1-8.3 (HW 9 due)	8.4-8.7	8.8-8.9
Nov 6, 8, 10	9.1-9.2 (HW 10 due)	9.3 and Review	Midterm 2
Nov 13, 15, 17	9.3-9.4	10.1	10.2
Nov 20, 22, 24	Thanksgiving Break	Thanksgiving Break	Thanksgiving Break
Nov 27, 29, Dec 1	10.3 (HW 11 due)	10.4	11.1-11.2
Dec 4, 6, 8	11.3-11.4 (HW 12 due)	12.1-12.2	Review
Dec 11, 13, 15		Final 11:50-1:50p	