

Syllabus for CS 250

Winter 2022

Professor: Steven Libby <slibby@pdx.edu>

office hours:

Steven Libby T/F 2:00-3:00 Fishbowl (Fourth Avenue Building)

This course is an introduction to the topics of Discrete Math and higher math in general. The goal is to prepare you with the foundational knowledge and skills to succeed in CS320, CS350, and other courses. Major topics to be covered include: Logic, sets, proofs, algorithms, counting, infinity, and graphs.

Schedule

Week 1: logic and sets (Ch2, Ch1)

Week 2: functions, relations, and proofs (Ch1, Ch6, Ch7, Ch8, Ch4)

Week 3: more proofs and algorithms (Ch4)

Week 4: algorithms and infinity (Ch4, Ch7)

Week 5: midterm review and midterm

Week 6: induction (Ch5)

Week 7: counting (Ch9)

Week 8: probability (Ch9)

Week 9: computational complexity and recurrence relations (Ch11)

Week 10: graphs (Ch10)

Grading

Homework: 30%

Midterm: 30%

Final: 40%

Resources

Textbook: Optional

“Discrete Mathematics with Applications” 5th ed., Susanna S. Epp

Python: Required for homework

<https://www.python.org/download/releases/3.0/>

Homework

You will get one assignment every week. All assignments are due at the start of class on Monday. Some assignments will involve light programming (in python). You may work with other students, but you have to write up the solutions yourself. If you cannot attend class on Monday, then you can either submit a digital copy written in Word or LaTeX, or you can scan your assignment and email it. I will not accept taking a picture with your phone. There will be no late assignments, except in extreme cases.

Disabilities

If you need accommodations for a disability contact the Disability Resource Center (DRC). Also, please inform me of any accommodation you will need as soon as possible.

Safety:

There's still a pandemic happening, so masks are required at all times while in class. You are also required by the school to be vaccinated.

Academic Integrity

If you are caught cheating, or plagiarizing someone else's work, then you will receive a 0 on that assignment. You'll also be reported to PSU's Conduct Office. Cheating includes, but is not limited to.

Turning in something that another student wrote.

Turning in anything you found on the internet.

If you didn't write it, then don't turn it in.