

Professor Peter Klosterman

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Office Hours: via Zoom (*Just email to set up a Zoom appointment*)

Text: *Discrete Mathematics with Applications (4th Ed.)*, by Susanna Epp

You should have access to the etext on day one because of the Inclusive Access program

Course Topics: Discrete Math will primarily focus on three broad topics:

1. Formal Logic (compound and conditional statements, valid/invalid arguments, logic circuits, binary, addition circuits)
2. Sequences (sigma notation, proof by induction, first and second order recursive sequences)
3. Counting and Probability (multiplication and addition rules, pigeonhole principle, permutation and combinations, Pascal’s Formula, Binomial Theorem, expected value, conditional probability)

Grading:

Homework (best 8 @ 12 pts)	96 pts
Questionnaire	5 pts
NES Practice Assignments	16 pts
3 Midterm exams	210 pts
<u>Final exam</u>	<u>150 pts</u>
Total Possible:	467 pts

The following grading scale will be used:

A	93-100%	C	73-77
A-	90-93	C-	70-73
B+	87-90	D+	67-70
B	83-87	D	60-67
B-	80-83	F	0-60
C+	77-80		

Homework Sets will be posted each week on Canvas and due the Tuesday of the following week by 9 PM. You will scan the HW and submit it via Canvas. When you scan and submit HW Sets, they must be sent as a single PDF document. If you don’t have a traditional scanner, there are several free apps for your phone that can convert pictures into a single PDF document. Popular options include Cam Scanner, Microsoft Office Lens or Adobe Scan. HW sent in multiple files or with upside-down pages will receive a 2 point deduction.

Each set will be graded on completion—completing all the problems and showing appropriate supporting work. If your HW lacks enough supporting work, I may ask you to set up a Zoom appointment with me to explain your reasoning. If you can do this, you’ll receive credit for the assignment like usual. If you cannot explain your reasoning or do not set up an appointment, then you will not receive credit for the assignment. Late homework is not accepted—submit whatever you have by 9 PM on Tuesday.

Exams: There will be a 70-point midterm exam at the end of chapter 2, chapter 5, and partway through chapter 9 (tentatively weeks 3, 6 and 9). Final exam is Wednesday, November 18th, 8:00 – 10:30 AM. Scientific or graphing calculators are allowed (and recommended) on exams. The textbook and notes are allowed for exams. However, I expect you to not work with any other human beings or consult the internet for exams. Clear evidence of doing this will result in a zero for that exam problem and possibly the entire exam. As with HW sets, I may ask you to set up a Zoom appointment with me to explain your reasoning on exam problems.

Makeup Exams will be given only in extreme cases for legitimate *documentable* reasons. If, for some legitimate reasons, you cannot make it to one of the exams, please contact the instructor *before* the exam.

Cheating will not be tolerated. Cheating will result in a zero grade for the exam and possibly a failing grade for the course. See the CWU Academic Dishonesty statement for more info: <https://www.cwu.edu/resources-reports/cwup-5-90-0104-academic-dishonesty>

Accommodations are available for students with disabilities. Students who wish to arrange for academic adjustments in this class are encouraged to provide me with a copy of their Confirmation of Eligibility for Academic Adjustments and meet with me as soon as possible to discuss their needs and the manner in which their accommodations will be delivered. Reasonable accommodations are also available for students who, due to the observance of religious holidays, expect to be absent or endure a significant hardship during certain days of the course or program.

Sexual Harassment is not tolerated. You are entitled to a safe and inclusive learning environment where you are treated with dignity and respect. Title IX considers sexual harassment to be a form of discrimination. If you experience sexual harassment, or know someone who is being sexually harassed, you are encouraged to report concerns to me, another faculty member or employee, or to Staci Sleigh-Layman, Title IX Coordinator, at 509- 963-1256, staci@cwu.edu. For more information about CWU's sexual harassment policies, refer to <https://www.cwu.edu/hr/reporting-sexual-misconduct>.

Other Helpful Information:

- Don't be afraid to book a Zoom office hour appointment. I get tired of working alone all day and welcome the chance to interact with students. It's my goal to see you succeed!
 - Realize that I try to keep normal work hours. Any emails sent after 4 or 5 PM may not be seen until the next day.
- Check Canvas announcements for heads-up about exams. Mark the exams on your calendar and set alarms so you don't forget about them!
- Mark the final exam on your calendar right away so you don't make vacation plans before you're done with the quarter

List of Topics

Logic, conditional statements, arguments, circuits (Chapter 2)

Sequences and induction (Chapter 5)

Counting and probability (Chapter 9)

Only if we have time:

Modular arithmetic (Section 8.4)

Graph theory (Chapter 10)