

Computer Science 243
Discrete Structures in Computer Science
Spring 2025
Syllabus

Instructor

Dr. Timothy Davis
McGlothlin-Street Hall 133
Office hours: MWTh 5:00-6:00
tadavis@wm.edu

Course Webpage

<http://www.cs.wm.edu/~tadavis/cs243/>

Class Meeting Times

Section 1: MW 2:00–3:20 Blow 333
Section 2: MW 3:30–4:50 Blow 333

Teaching Assistants

Hanzhao Li	hli31@wm.edu	F 9:00–10:00	Ewell 254
Wenhan Lyu	wlyu@wm.edu	Tu 12:30–1:30	MS 002

Prerequisite

CSCI 141

Textbook

Kenneth H. Rosen, *Discrete Mathematics and Its Applications*, 8th edition, 2018.

Course Description

This course covers elementary discrete mathematics for computer science. It emphasizes definitions and proofs as well as applicable methods. Topics include propositional logic, first-order logic, proof methods; sets, functions, relations; mathematical induction, recursion; graph theory; permutations and combinations, counting; probability.

Grading

Final grades will be based on homework assignments, tests, and a final exam. Letter grades will be based on a 10-point scale, with +/- designations awarded accordingly.

Homework	30%		
Tests (2)	40%		
Final Exam	30%	Section 1: Tuesday	May 13 2:00–5:00
		Section 2: Friday	May 9 9:00–12:00

Last day to drop: Friday, January 31, 2025
Last day to withdraw: Monday, March 24, 2025

Course Guidelines

To be successful in this course, you must follow several guidelines, listed below.

- **Attendance** Attendance is not required, but strongly recommended. Students are responsible for acquiring class notes for any missed lectures.
- **Class Cancellation** Students are expected to wait for 15 minutes after the scheduled class starting time before leaving if the instructor is late.
- **Deadlines** Deadlines will be enforced, with a late penalty of 10%/day. No work will be accepted after the assignment is graded and returned. Additionally, no emailed assignments will be accepted.
- **Grade Disputes** Scores for graded work will be posted in Blackboard. Any questions or disputes concerning assignments, exams, or programs, can be discussed no sooner than 24 hours, and no later than one week, after the date the graded work is posted/returned; otherwise, all grades are final. Please note that the entire assignment, project, or exam, not just the part in question, is subject to regrading.
- **Class Recordings** Meetings of this class may be recorded and posted on Blackboard.

Homework Assignments

Homework assignments will be due each week to help you better understand the material presented in class. These assignments do not involve programming.

- Homework assignments are due every Wednesday, except where noted.
- Homework assignments must be typeset in LaTeX (or Word). You must learn LaTeX on your own; resources are available on the course webpage.
- All work must be shown; otherwise, points may be deducted.
- Proofs by induction must state explicitly the inductive basis, the inductive hypothesis, and what is to be proven in the inductive step.
- Problems must be completed according to methods covered in class; alternate methods or those that produce different results will be counted as incorrect.
- Points may be deducted even if your answer is correct when your solution is more complicated than it needs to be, difficult to read or understand, not expressed in correct technical English, or incomplete.

Further, all assignments must be completed in accordance with the course Honor Code:

- You may discuss homework problems with the instructor and TA only.
- You cannot consult current students, students who have taken the course previously, nor any student work previously submitted.
- You may consult books, papers, publications, and the internet (but not AI), though all necessary information for completing homework assignments will be given in class.
- Homework write-ups should cite any references for each problem.
- Do not plagiarize – write solutions in your own words.

University Policy

Accommodations William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels s/he may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see www.wm.edu/sas.