

Syllabus

Discrete Structures

Spring 2026

This course is an introduction to the study of *computation*. The objective is to cultivate the mathematical maturity and frame-of-mind characteristic of a computer scientist. This involves fluency in the first-order logic, an understanding of axiomatic deductive argumentation, a cultivation of the ability to write proofs, and deep knowledge of fundamental topics like set theory, arithmetic, induction, recursively defined structures, and the relative cardinalities of finite and infinite sets.

1 Schedule

Lectures will be held on Mondays, Wednesdays, and Fridays from 4:00 PM to 4:50 PM in 151 Loomis Laboratory.¹

¹Lectures will be recorded and then linked to from the course website.

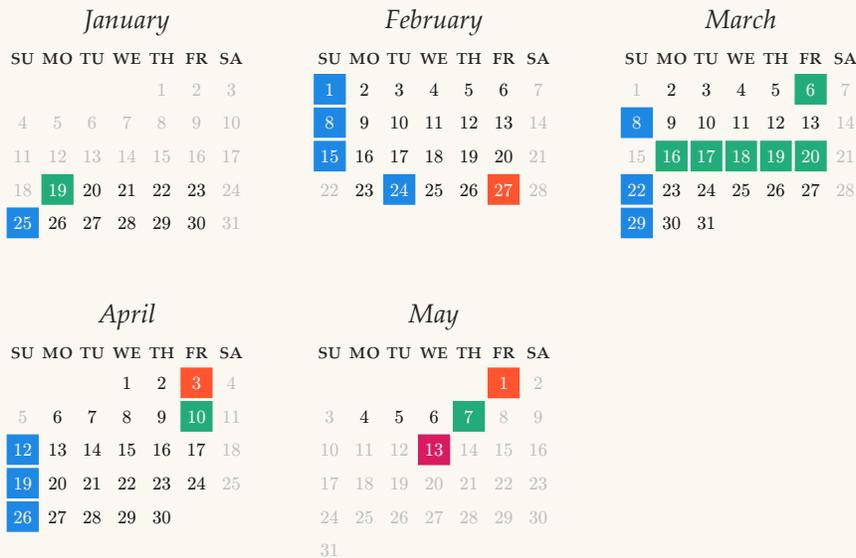


Fig. 1. Dates and events of interest.

- ? Problem Set due date
- ? Midterm Exam date
- ? Final Exam date
- ? Holiday

2 Resources

Website

The course website can be found at cs173.tech. It contains all of the information relevant to the course, including lecture notes, problem sets, solutions, staff contacts, office hours, this syllabus, and more.²

Slack

The course Slack server, located at uiuc-cs173.slack.com, will be the primary medium for announcements, questions, discussions, and all other basic communication between staff and students.

²There is no required textbook for this class. The instructor is preparing lecture notes, which will be continually updated as the semester progresses and published on the course website.

3 Grading



Fig. 2. The scale for determining letter grades. Final grades are rounded up to the next integer.

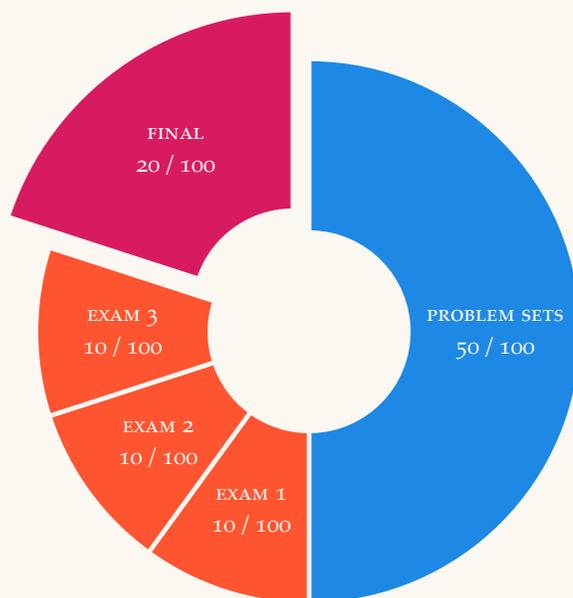


Fig. 3. Breakdown of grades by type.

4 Assignments

Problem Sets

There will be roughly 10 graded problem sets³ throughout the semester. Problem sets will be assigned weekly and due on Sundays at 11:59 PM unless there was an exam the preceding week. The lowest 2 out of the 10 graded problem sets will be dropped when computing overall grades. Late work will not be accepted.⁴

Problem sets will be submitted through [Gradescope](#). You may choose to *handwrite*⁵ or *typeset*⁶ your submission. Submitted assignments *must* have questions assigned to pages. Submissions that fail to assign questions to pages *will be penalized* for the inconvenience to our graders.

Work that is illegible, unorganized, or otherwise unprofessional will be penalized at the sole discretion of the grader. We aim to return your graded feedback within one week of the submission deadline.

Midterm Exams

There will be three midterm exams spaced throughout the semester. All midterm exams will be administered in class during the regularly-

³... in addition to the first problem set ps00, which will be ungraded...

⁴If you have an extenuating circumstance, please contact the instructor.

⁵Make sure your handwriting is professional and your work is well-organized.

⁶[L^AT_EX](#) and [Typst](#) are the standard tools for typesetting academic documents.

scheduled class time. You are allowed one sheet⁷⁸ of *handwritten*⁹ notes for midterm exams.

Final Exam

There will be a cumulative final exam on the 13th of May. The final will be administered between the hours of 1:30 PM and 4:30 PM. The location of the final exam has not yet been determined. You are allowed two sheets¹⁰¹¹ of *handwritten*¹² notes for the final exam.

If the numerical score¹³ of the final exam is greater than the lowest numerical score¹⁴ of any of the individual midterm exams, then the score from the final exam will replace the lowest midterm score.¹⁵

5 Honor Code

	COLLEAGUES	RESOURCES	SOLUTIONS	LLM
CONSULTING	ALLOWED	ALLOWED	FORBIDDEN	DISCOURAGED
COPYING	FORBIDDEN	CITE	FORBIDDEN	FORBIDDEN

See the [student code](#) for general university guidelines and detailed information on [academic integrity](#) for students.

⁷⁸standard 8.5x11 or A4 size

⁸front-and-back

⁹Printed, digital, and typeset notes are *not allowed*; notes must be physically written on paper by hand.

¹⁰standard 8.5x11 or A4 size

¹¹front-and-back

¹²Printed, digital, and typeset notes are *not allowed*; notes must be physically written on paper by hand.

¹³measured out of 100 points

¹⁴measured out of 100 points

¹⁵In the case of a tie, the final score will only replace one midterm score.

Tab. 1. The rules of engagement.