

## 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, 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.<sup>1</sup>

<sup>1</sup>Lectures will be recorded and then uploaded to the course website.

| January |    |    |    |    |    |    | February |    |    |    |    |    |    | March |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|----------|----|----|----|----|----|----|-------|----|----|----|----|----|----|
| SU      | MO | TU | WE | TH | FR | SA | SU       | MO | TU | WE | TH | FR | SA | SU    | MO | TU | WE | TH | FR | SA |
|         | 1  | 2  | 3  |    |    |    | 1        | 2  | 3  | 4  | 5  | 6  | 7  | 1     | 2  | 3  | 4  | 5  | 6  | 7  |
| 4       | 5  | 6  | 7  | 8  | 9  | 10 | 8        | 9  | 10 | 11 | 12 | 13 | 14 | 8     | 9  | 10 | 11 | 12 | 13 | 14 |
| 11      | 12 | 13 | 14 | 15 | 16 | 17 | 15       | 16 | 17 | 18 | 19 | 20 | 21 | 15    | 16 | 17 | 18 | 19 | 20 | 21 |
| 18      | 19 | 20 | 21 | 22 | 23 | 24 | 22       | 23 | 24 | 25 | 26 | 27 | 28 | 22    | 23 | 24 | 25 | 26 | 27 | 28 |
| 25      | 26 | 27 | 28 | 29 | 30 | 31 |          |    |    |    |    |    |    | 29    | 30 | 31 |    |    |    |    |

| April |    |    |    |    |    |    | May |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|-----|----|----|----|----|----|----|
| SU    | MO | TU | WE | TH | FR | SA | SU  | MO | TU | WE | TH | FR | SA |
|       | 1  | 2  | 3  | 4  |    |    |     | 1  | 2  |    |    |    |    |
| 5     | 6  | 7  | 8  | 9  | 10 | 11 | 3   | 4  | 5  | 6  | 7  | 8  | 9  |
| 12    | 13 | 14 | 15 | 16 | 17 | 18 | 10  | 11 | 12 | 13 | 14 | 15 | 16 |
| 19    | 20 | 21 | 22 | 23 | 24 | 25 | 17  | 18 | 19 | 20 | 21 | 22 | 23 |
| 26    | 27 | 28 | 29 | 30 |    |    | 24  | 25 | 26 | 27 | 28 | 29 | 30 |
|       |    |    |    |    |    |    | 31  |    |    |    |    |    |    |

Fig. 1. Important dates and events.

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

### 2 Resources

#### Website

The course website can be found at [cedre.tech](http://cedre.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.<sup>2</sup>

#### Slack

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

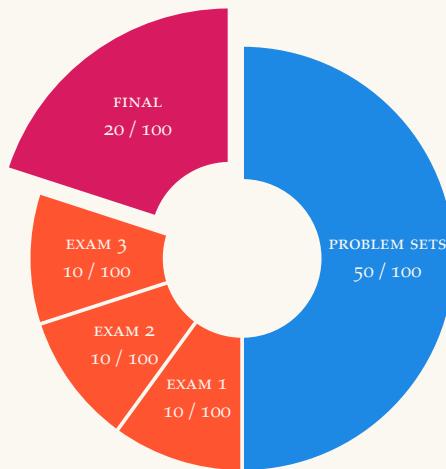
<sup>2</sup>There is no required textbook for this class. The instructor is preparing lecture notes, which will be continually updated as the semester progresses and published on the course website.

### 3 Grading

|    |    |    |    |    |    |    |    |    |   |
|----|----|----|----|----|----|----|----|----|---|
| 93 | 90 | 87 | 83 | 80 | 77 | 73 | 60 | 50 |   |
| A  | A- | B+ | B  | B- | C+ | C  | C- | D  | F |

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

Fig. 3. Breakdown of grades by assignment type.



### 4 Assignments

#### Problem Sets

There will be roughly 10 graded problem sets<sup>3</sup> 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 out of the 10 graded problem sets will be dropped when computing overall grades. Late work will not be accepted.<sup>4</sup>

Problem sets will be submitted through [Gradescope](#). You may choose to handwrite<sup>5</sup> or typeset<sup>6</sup> your submission. We will aim to return your graded feedback within one week of the submission.

#### Exams

There will be three midterm exams spaced throughout the semester and a cumulative final exam at the end of the semester. All midterm exams will be administered in class during the regularly-scheduled class time. You will be allowed one sheet<sup>78</sup> of *handwritten*<sup>9</sup> notes for midterms; two sheets will be allowed for the final exam.

If the final exam score is greater than the score of the lowest midterm exam, then the final exam score will replace the score of the lowest midterm exam.

<sup>3</sup>... in addition to the first problem set ps00, which will be ungraded...

<sup>4</sup>If you have an extenuating circumstance, please contact the instructor.

<sup>5</sup>Make sure your writing is professional and your work is organized. Illegible submissions will be given zero credit.

<sup>6</sup>[LATEX](#) and [Typst](#) are the standard tools for typesetting academic documents.

<sup>7</sup>standard 8.5x11 or A4 size

<sup>8</sup>front-and-back

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

## 5 Honor Code

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

Tab. 1. The rules of engagement.

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