### Discrete Structures

Instructor: Yuandong Cyrus Liu

Mentor: Minh Nguyen

Meeting Times: Th 8:30 AM - 09:50 PM (Science 3815)

Grinnell College • Computer Science

01/23/2024



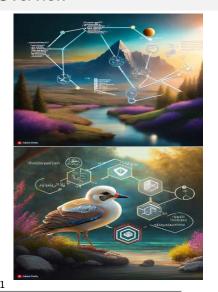
### Overview

### Discrete Mathematics vs Discrete Structures

- Practical.
- Theory.
- Abstract and precise.
- World, nature, principles, etc.

CSC 208-01

### Overview





 $^{1}\mathsf{Create}$  an image about discrete math and its application.

### Overview





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 $<sup>^2\</sup>mbox{Create}$  an image about discrete math and its application, with logic, proofs, functions, and graph.

## Learning Outcomes

- Logics, proofs, modeling.
- Sets, functions, graphs.
- Combinatorics, probabilities, reasoning and design.

Soft skills.

# Textbook, Software, and Connectivity

- Course website for readings/exercises, https://liu.cs.grinnell.edu/csc208-01/.
- Github open sharing (Commit, PR, Issues, practice your Git !!),
  https://github.com/grinnell-cs/csc208-open-share.
- Gradescope, https://www.gradescope.com/courses/695562, entry code:EJD7E5.

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# Course Evaluation and Grading

- Details in syllabus and core learning outcome on the website.
- Daily drills, lab exercises, projects, core exams.
- 48 hours grace period, EMRN rubric.

Table: Deliverables Grading

	Daily Drill	Lab Exercises	Homeworks	Exams
Grades	S/N	S/N	E, M, R, N	S/N
Amount	Daily	Per class	$\tilde{5}$	$\tilde{3} \times 5$ (self-paced)
Due	Class day	Saturdays	one week after	45 Min.
Missing	48 Hrs (max 3)	48 (max 3)	None	None
All	Due Sunday, May 19, 5:00 PM CST			

#### Overall letter grades

- Homeworks and Core exams contribute to A, B, C, D, F.
- Daily drill and lab exercise contribute to  $Letter^{+/-}$ .

### Office Hours

- Location: Noyce Science 3818
- Tuesdays: 9:50 AM 11:50 AM
- Thursdays: 11:00 AM 12:00 AM
- By appointment.

## Warm-up with Latex

#### Why Should I Use Latex

- A tool helps you write scientific paper.
- Syntax, typesetting, customizing.
- References, media, tables, figures management.
- Math, physics, techniques (theorems, proofs, symbols).
- You may work with group, but no more than 2 person each group.
- Change your partner as often as you can!



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