

CS 173: Discrete Structures

Syllabus, Logistics, and Math Review

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A bit about me



What are we going to learn?

- From Course Explorer:

Discrete mathematical structures frequently encountered in the study of Computer Science. Sets, propositions, Boolean algebra, induction, recursion, relations, functions, and graphs.

- Slightly more poetic:

You will become fluent in formal math and practice powerful proof techniques to prepare for subsequent CS courses.

What work do we ~~have~~ get to do?

- Reading assignments (async)
- Lecture videos (async)
- Discussion sessions (sync, if possible)
- Homework (auto-graded)
- Examlets & final
- Study problems (ungraded)



Exam



Examlet



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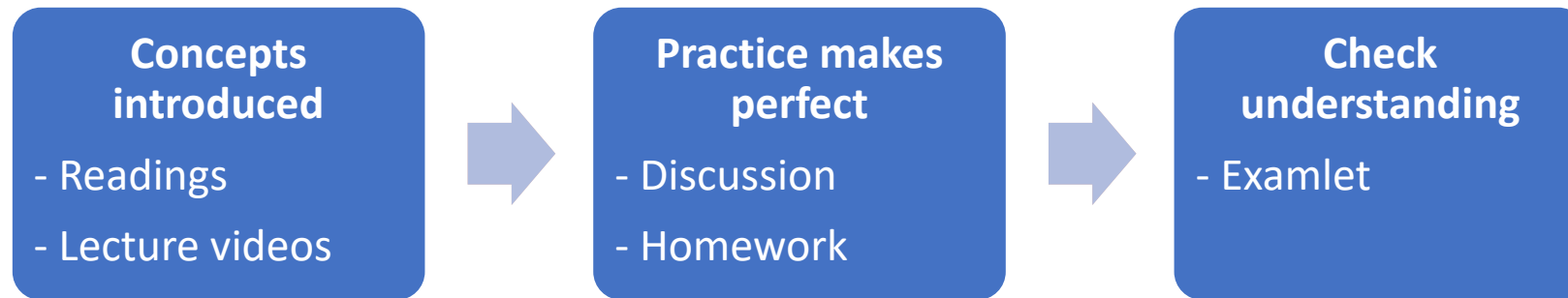
Pig



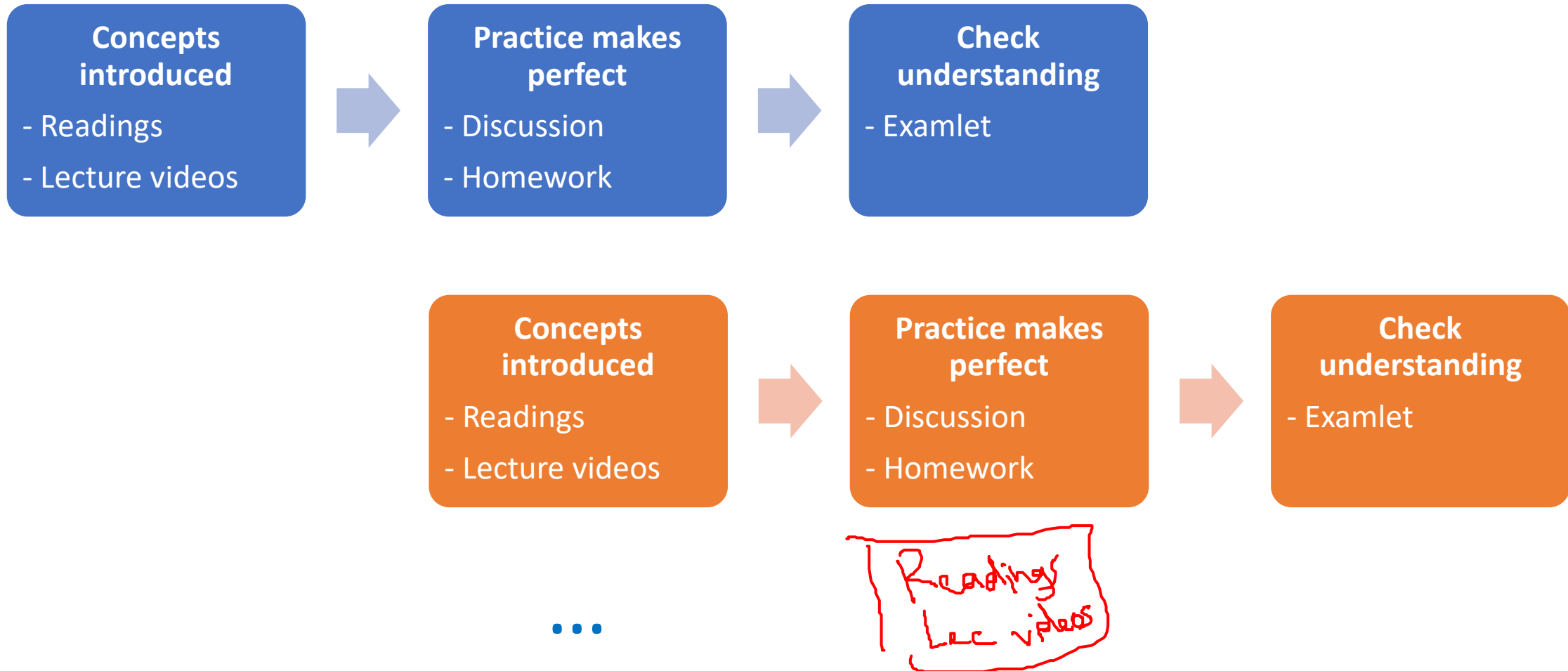
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Piglet

Why are there so many moving parts?



Phases of learning are staggered.



Where can I find course content?

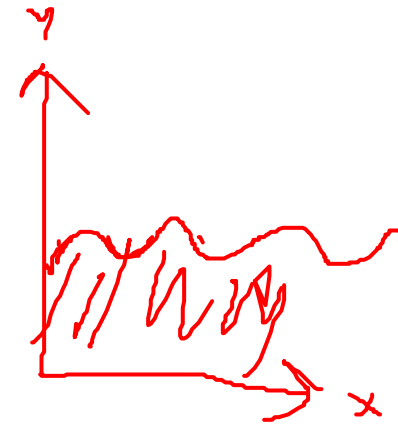
- Moodle *173 is prime*
 - Readings (links to Perusall)
 - Homeworks
 - Examlets
- Website
 - Syllabus
 - Schedule (links to lecture videos, study problems)
 - Help/resource pages
- Piazza
 - Announcements
 - Q & A

Math Review

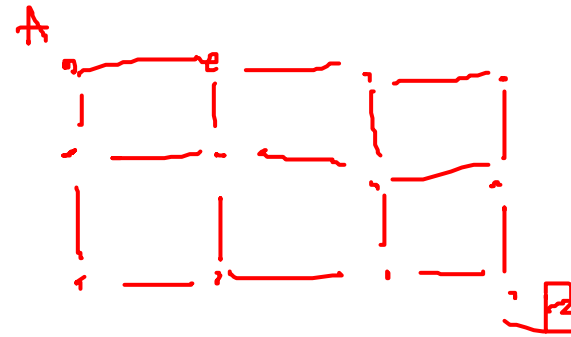
- Continuous vs. discrete
- Some special sets

Σ log

\mathbb{R} = reals
 \mathbb{Z} = integers
 \mathbb{N} = naturals
 $\{0, 1, 2, 3, \dots\}$
 \mathbb{Q} = rationals



$f: \mathbb{R} \rightarrow \mathbb{R}$
 $f(x) = -\cos(x) + 3$



Next steps

- Discussion session this afternoon (1 p.m. CDT)
 - Preparation: Lectures 01a, 01b (links on Schedule page)
- Check Moodle for first homework, first reading assignments
- Future lectures pre-recorded (links on Schedule page)
- Practice examlet (no points) on Thursday