Computational Structures

Tim Sheard & James Hook
Portland State University

Class Preliminaries

Two Sections

- This class is taught in two sections
  - CRN 11043 Tue & Thur 10:00-11:50 BHB 222
  - CRN 14577 Tue & Thur 14:00-15:50 FAB 40-07
- Each section has a different instructor
  - Tim Sheard. Tue & Thur 10:00-11:50
  - James Hook. Tue & Thur 14:00-15:50

Contact Details:

- Tim Sheard:
  - Office: Fourth Ave Building (FAB) 120-04
  - Telephone: (503) 725-2410
  - Email: sheard@cs.pdx.edu
- James Hook
  - Office: Engineering Building (EB) 502E
  - Office: Fourth Ave Building (FAB) 120-05
  - Telephone: (503) 725-5540, (503) 725-5166
  - Email: hook@cecs.pdx.edu
  - Office Hours: Monday, 3 – 5pm, EB 502E

- CS 311:
  - http://web.cecs.pdx.edu/~sheard/course/CS311/index.html

Teaching assistant:

- Long Mai
- Email mai.t.long88@gmail.com
- Office hours: TBA

- Further arrangements to be made as the class progresses.

Exams

- Midterm:
  - Most probably Tuesday, October 30, 2012

- Final:
  - Tuesday **December 4**, 2012, 10:15-12:05 (Sheard)
  - Monday **December 3**, 2012, 10:15-12:05 (Hook)

Methods of assessment:

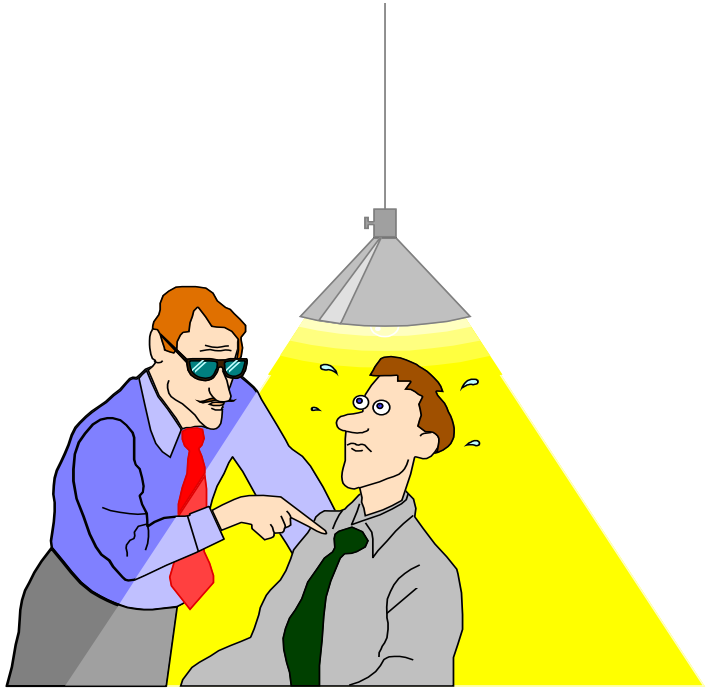
Quizzes (15 min, weeks 3 & 8, closed book)	15%
Homework (8 weekly homeworks)	40%
Midterm (most probably Oct 30)	15%
Final exam (Dec 3 or 4,)	30%
TOTAL	100%

Policies:

- By default, all deadlines are firm.
- We will be as flexible as possible in accommodating special circumstances; but advance notice will make this a lot easier.

Academic Integrity

- We follow the standard PSU guidelines for academic integrity Students are expected to be honest in their academic dealings. Dishonesty is dealt with severely.
- Examinations. Notes and such,
- only as the instructor allows.
- Homework..
  - Discussion is good;
  - Items turned in should be your own
  - individual work. You are encouraged
  - to talk to other people about the
  - homework problems, but you must write
  - up your answers independently. If
  - you're stuck with a problem,
  - please ask for help.



Course Text:

- *Discrete Stuctures, Logic, and Computability*
  - *(3rd ed)*
  - James L. Hein
  - Published by Jones and Bartlett
  - ISBN-13 978-0-7637-7206-2
  - ISBN-10 0-7637-7206-2
- Home page of the text book:
  - **http://www.jblearning.com/catalog/9780763772062/**

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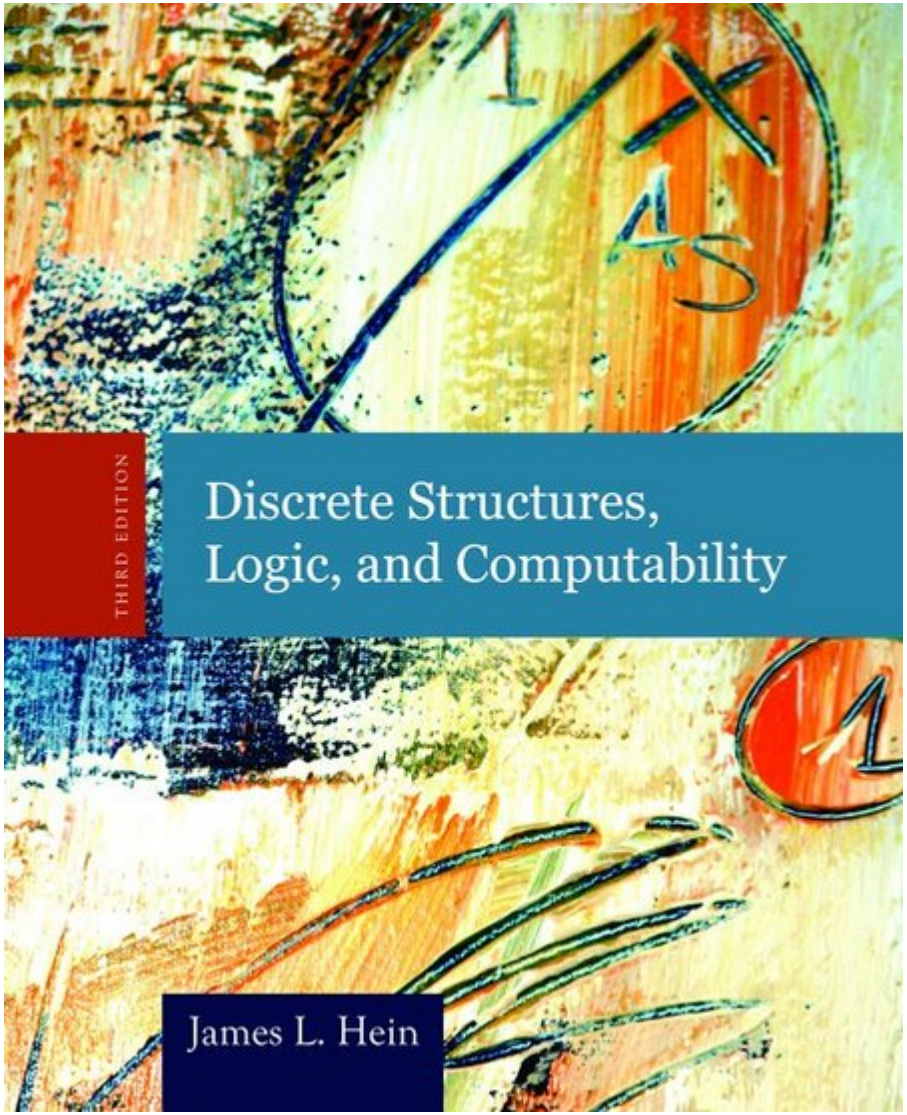

Syllabus

- *Mathematical Preliminaries*
  - *(.5 week, review)*
- *Finite Automata and Regular Languages*
  - *(3.5 weeks, chapter 11)*
- *Pushdown Automata and Context-Free Languages*
  - *(2.5 weeks, chapter 12)*
- *Turing Machines and Undecidability*
  - *(2.5 weeks, chapter 13)*

Prerequisites - Self Exam

- Review Readings
  - Sets 1.1, 1.2
  - Strings 1.3.3, 3.1.2, 3.2.2
  - Logic 6.1, 6.2, 6.3, 7.1
  - Proofs 4.4
- You should know this review material