# **CSE 101: ALGORITHMS -- General notes**

# **Syllabus**

Basics of graphs: traversals; cycles; connectivity; trees and dags Divide-and-conquer strategies
Greedy algorithms
Dynamic programming
Hashing and sketching
Linear programming
Intractability and ways to cope with it

### Course materials

Required text (available at bookstore): Dasgupta-Papadimitriou-Vazirani Lectures will be recorded and available at http://podcast.ucsd.edu.

## **Discussion sections**

You must choose a particular discussion section to attend weekly. Homeworks and guizzes will be returned at this section.

Wed 4-5, Peterson 102 Wed 6-7, Peterson 102 Wed 7-8. Mandeville B-150

#### **Examinations**

Midterm 1: TBA, in class Midterm 2: TBA, in class

Final: December 9, 3-6pm, in class

# Homework policy

There will be a homework due every Friday at noon (via GradeScope, see below), and a quiz that Friday covering the same material. Solutions to the homework will be posted shortly after it is due.

A good way to understand the course material is to discuss homeworks with your peers.

## **Using Gradescope**

We will be handling homeworks through Gradescope. To initialize your account, go to gradescope.com, enter your campus email address, and select "Forgot password" to trigger a password reset. If the system does not recognize your email, please contact the instructor or TAs.

Homeworks can be handwritten or typeset, but *each problem should begin on a fresh page*; this is not necessary for subproblems. Upload a PDF of your homework to gradescope.com by noon on Friday at the latest; no late submissions will be accepted. When uploading, you will be asked to indicate which page(s) correspond to which problems.

#### Grading

Homeworks: 10% (lowest score will be dropped) Quizzes: 20% (lowest score will be dropped)

Midterms: 15% each

Final: 40%