

CPSC 320: Intermediate Algorithm Design and Analysis

What is the course about?

- This is a course about problem solving
 - recognizing which algorithm design technique an algorithm uses.
 - recognizing similarities between new problems and problems you're already familiar with.
 - selecting a promising data structure or technique to tackle a problem.
 - implementing a solution to a problem, using a specific technique.
 - establishing tight bounds on the running time of our solution.

Course mechanics

- We learn by doing
 - I can talk about something, but you will only learn it when you actually work on it.
 - So we will spend most of our class and tutorial time working on problems
 - worksheets
 - tutorial quizzes

Course mechanics

- What about the readings?
 - we will assign readings from the textbook weekly
 - then there will be a short quiz on Canvas so you can test your understanding of what you read.
 - quizzes are due every Sunday at 22:00
 - ↳ except for Sunday February 18th.
- The piazza access code is
 - Long Live Efficiency!

Course mechanics

- Tutorials
 - Type 1:
 - ▶ 25 minutes group work, followed by 25 minutes individual quiz.
 - ▶ will occur in weeks 2, 4, 7, 9 and 11.
 - Type 2:
 - ▶ all group work, or short TA presentation followed by group work.
- Assignments (5):
 - due Monday the second week after the tutorial quiz

Grading

- Breakdown
 - Pre-class quizzes: 2%
 - Tutorial quizzes: 2%
 - Assignments: 23%
 - Midterms: $2 * 15\% = 30\%$
 - ▶ February 6th and March 13th, 18:00 to 20:00
 - Final Exam: 40%
 - Best of the previous five items: 3%.
- Footnotes in your favour are on the course web site

Course web site

- See
 - <https://blogs.ubc.ca/cpsc3202017winter2/>
- It contains
 - a fuller syllabus than I've put on these slides.
 - links to Canvas, Gradescope and Piazza
 - and a lot more.
- Finally
 - Set up your @ugrad.cs.ubc.ca account right away, as we'll use it for several purposes.
 - If you have any questions, please ask us!