

# CSE 3101: Design and Analysis of Algorithms

York University — summer 2006

updated May 5, 2006

**Instructor:** Phuong Nguyen

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For e-mails, please include in the subject “3101”. Messages without this header may be ignored.

**Lectures:** Tuesday 7–10pm in CB 115

**Instructor Office Hours:** Tue 3-4 in CSEB 2015

**Course website:** <http://www.cs.yorku.ca/course/3101/>

Refer to this site frequently for assignments, tests, announcements, etc.

**Text:** Cormen, Leiserson, Rivest, Stein

Introduction to Algorithm (2nd edition). McGraw-Hill (2001), ISBN: 0-07-013151-1

**Reference:** Jon Kleinberg and Éva Tardos

Algorithm Design (2006) by Pearson Education, ISBN: 0-321-29535-8

## Course Contents

- Mathematical background
- Sorting algorithms
- Divide and conquer
- Greedy algorithms
- Dynamic programming
- Graph search
- Network flow
- A glimpse at NP-completeness

## Marking Scheme:

- 3 assignments due *at the beginning of classes* on May 16 (10%), June 20 and July 18 (15% each)
- 3 closed-book, 2-hours tests worth 20% each, in classes on June 6, July 4 and last class. *Must obtain at least 40% of the last test.*

**20% Rule:** For a question in assignments or tests: Write “I don’t know” *and nothing else* and receive 20% of the mark.

**Test Make-up:** No. Take min(test, last test).

**Late Assignments:** Minus 20% of the original mark for each day. *Must contact the instructor.*

**Remarking Request:** Must be written and handed in *within 2 weeks.*

*The work you submit must be your own.* You may discuss problems with each others; however, you should prepare written solutions alone. Copying assignments is a serious academic offence, and will be dealt with accordingly.