Design and Analysis of Algorithms I (COMP 3804) Sections A—D

Winter 2022

Instructor: Michiel Smid
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Course webpage: http://cglab.ca/~michiel/3804.html

Lectures:

- Lecture times: see course webpage

- Two sections will be in-person and the other two sections will be on-line.

- The first three weeks will be on-line. Carleton will let us know what happens after January 31.

Course objectives: An introduction to the design and analysis of algorithms.

Prerequisites: (COMP 2402 or SYSC 2100) and either COMP 2804 or (MATH 2007 and MATH 2108).

Topics covered include: Divide-and-conquer algorithms and their analysis using recurrence relations, graph algorithms, dynamic programming, the theory of NP-completeness.

Grading scheme:

- 4 assignments: 25%

- midterm: 25%

- final exam: 50%

Important dates (assignments due dates, midterm format and final exam format): These will be posted on the course web page.

Academic Integrity (New, Please Read): As of 2020, there are new penalties in place for academic integrity violations. These will be issued by the Associate Dean (Undergraduate Affairs) of Science to students who copy, in whole or in part, work they submit for assignments.

- First offence, first-year students (< 4.0 credits completed): No credit for assessment(s) in question, or a final grade reduction of one full letter grade (e.g., A- becomes B-), whichever is a greater reduction.

- First offence (anyone else): A grade of F in the course.

- Second offence (anyone): A grade of F in the course and a one-term suspension from studies.

- Third offence: Expulsion from the University.

Note: While these are the standard penalties, more severe penalties may be applied when warranted.

For more information, go to `https://science.carleton.ca/academic-integrity/`

Undergraduate Academic Advisor: The undergraduate advisor for the School of Computer Science is available in Room 5302C HP, by telephone at 520-2600, ext. 4364 or by email at `undergraduate_advisor@scs.carleton.ca`. The advisor can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisor will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and the Writing Tutorial Services.

University Policies: Carleton University is committed to providing access to the educational experience in order to promote academic accessibility for all individuals. Information on how to apply for academic accommodation can be found at
`https://students.carleton.ca/course-outline/`