# Design and Analysis of Algorithms I (COMP 3804) Sections A and B

Winter 2023

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

**Lectures:**

- Lecture and tutorial times: see course webpage
- All lectures and tutorials will be in-person.

**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:** If you are unsure of the expectations regarding academic integrity (how to use and cite references, if collaboration with lab- or classmates is permitted (and, if so, to what degree), then you must ASK your instructor. Sharing assignment or quiz specifications or posting them online (to sites like Chegg, CourseHero, OneClass, etc.) is ALWAYS considered academic misconduct. You are NEVER permitted to post, share, or

upload course materials without explicit permission from your instructor. Academic integrity offences are reported to the office of the Dean of Science. Information, process and penalties for such offences can be found on the ODS webpage:

`https://science.carleton.ca/students/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/`