COMP/MATH 3804, Sections A and B
Design and Analysis of Algorithms I

Winter 2026

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

- Section A:
  - Lectures: Tuesday and Thursday, 8:35 – 9:55
  - Tutorials: Wednesday, 17:35-18:55
  - Classrooms: Check Carleton Central
  - All lectures and tutorials will be in-person, they will not be video-recorded.
- Section B:
  - Lectures: Monday and Wednesday, 16:05 – 17:25
  - Tutorials: Wednesday, 17:35-18:55
  - Classrooms: Check Carleton Central
  - All lectures and tutorials will be in-person, they will not be video-recorded.

Teaching assistants: A list of teaching assistants will be posted on the course webpage once the course starts.

Office hours: Will be posted on the course webpage once the course starts.

Important dates and deadlines can be found here:

https://carleton.ca/registrar/regulations/

including class suspension for fall, winter breaks, and statutory holidays.

Prerequisite: COMP 2402 and one of (COMP 2804 or MATH 3855 or MATH 3825 or COMP 3805).

Topics covered:

- An introduction to the design and analysis of algorithms. Topics include: divide-and-conquer, dynamic programming, linear programming, greedy algorithms, graph algorithms, NP-completeness.

- A tentative week-by-week schedule will be posted on the course webpage.

Learning Materials:

- Handwritten notes will be posted on the course webpage.
- Algorithms, by Sanjoy Dasgupta, Christos Papadimitriou, Umesh Vazirani.
- Students are not required to purchase textbooks or other learning materials for this course.

Assessment scheme:

- Test 1 (during tutorial, Wednesday January 28): 12.5%
- Test 2 (during tutorial, Wednesday February 11): 12.5%
- Test 3 (during tutorial, Wednesday March 11): 12.5%
- Test 4 (during tutorial, Wednesday March 25): 12.5%
- Final exam: 50%

Late and Missed Work Policies: Any missing test will be covered by the final exam.

School of Computer Science Laptop Requirement: Every student that has been enrolled in a 1000-level (i.e., first year) course offered is required to have a laptop. This includes COMP1001, COMP1005, and COMP1006. For more information, please visit

`https://carleton.ca/scs/scs-laptop-requirement/`

and then review the requirements at

`https://carleton.ca/scs/scs-laptop-requirement/laptop-specs/`

Undergraduate Academic Advisors: The Undergraduate Advisors for the School of Computer Science are available in Room 5302HP; or by email at

`scs.ug.advisor@cunet.carleton.ca`

The undergraduate advisors can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisors will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and Writing Tutorial Services.

SCS Computer Laboratory: Students taking a COMP course can access the SCS computer labs. The lab schedule and location can be found at

`https://carleton.ca/scs/tech-support/computer-laboratories/`

All SCS computer lab and technical support information can be found at

`https://carleton.ca/scs/tech-support/`

Technical support staff may be contacted in-person or virtually, see this page for details:

https://carleton.ca/scs/tech-support/contact-it-support/

Academic Accommodations: Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes are outlined on the Academic Accommodations website

https://students.carleton.ca/course-outline/

Chat GPT/Generative AI Usage: Since all graded assessments are in-person tests and final exam, this section is not applicable to this course.

Academic Integrity: Misconduct in scholarly activity will not be tolerated and will result in consequences as outlined in Carleton University's Academic Integrity Policy, see

https://carleton.ca/registrar/academic-integrity/

A list of standard sanctions in the Faculty of Science can be found at

https://science.carleton.ca/students/academic-integrity/

Additional details about this process can be found on the Faculty of Science Academic Integrity website. Students are expected to familiarize themselves with and abide by Carleton University's Academic Integrity Policy.

Student Rights and Responsibilities: Students are expected to act responsibly and engage respectfully with other students and members of the Carleton and the broader community. See the 7 Rights and Responsibilities Policy

https://carleton.ca/studentaffairs/student-rights-and-responsibilities/

for details regarding the expectations of non-academic behaviour of students. Those who participate with another student in the commission of an infraction of this Policy will also be held liable for their actions.