

# COMP 3804 AB - Fall 2026

## Design and Analysis of Algorithms I



### Course Information

For class locations, please see Carleton Central.

| Section   | Class Days | Class Time        |
|-----------|------------|-------------------|
| COMP3804A | WF         | 2:35 pm - 3:55 pm |
| COMP3804B | TR         | 4:05 pm - 5:25 pm |

| Instructor  | Office | Email                        |
|-------------|--------|------------------------------|
| Darryl Hill | HP5173 | darrylhill@cunet.carleton.ca |

Course Website: <https://brightspace.carleton.ca>

The delivery of material will consist of the following:

- **Lectures** will be given **live** and **in class**.
- **Tutorial Sessions** are weekly workshops where you may work on class work and get TA assistance. This is also where you will write your tests.
- **TA office hours** will be during the tutorials.
- **Assignments** are to be used as study tools. Solutions will be given, but there are no assignment marks.
- **Tests** will be held during the tutorial session on the dates indicated in the calendar (attached and available on Brightspace). The test content will be based on the assignments.
- Questions pertaining to lectures, quizzes, and general course material can also be asked / answered on **Brightspace**.
- The **final exam** will be an **in-person exam** scheduled by registrar.

### Course Description

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

## Prerequisites

Prerequisites for COMP3804: COMP 2402 and one of (COMP 2804 or MATH 3855 or MATH 3825 or COMP 3805).

Prerequisites for MATH3804: i) one of COMP 2402 or SYSC 2100, and ii) one of COMP 2804, MATH 3855, MATH 3825, or COMP 3805.

For all course prerequisites, see the course calendar here:

[calendar.carleton.ca/undergrad/](https://calendar.carleton.ca/undergrad/)

## Reference Textbook

- Handwritten lecture notes.
- Algorithms, by Sanjoy Dasgupta, Christos Papadimitriou, and Umesh Vazirani.
- Students are not required to purchase textbooks or other learning materials for this course.

## SCS Laptop Requirement

Every student that has been enrolled in a 1000-level (i.e., first year) course offered by the School of Computer Science after the 2020/2021 school year 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/>.

## Evaluation

Final grades will be determined using the scheme described below, and no extra credit assignments will be provided under any circumstances. Missed tests will automatically have their weight transferred to the final exam. You do not need to notify your instructor of a missed test.

See the **Calendar** attached and posted to Brightspace for the test dates.

|                       |          |             |
|-----------------------|----------|-------------|
| Tests (4)             | 15% each | 60%         |
| Final Examination (1) |          | 40%         |
| <b>Total</b>          |          | <b>100%</b> |

### Test Scheduling:

Tests are held during the tutorial, in the tutorial room (please see Carleton Central for exact location and time).

|        |                  |
|--------|------------------|
| Test 1 | Monday Sept 28th |
| Test 2 | Monday Oct 19th  |
| Test 3 | Monday Nov 16th  |
| Test 4 | Monday Dec 7th   |

## Late and Missed Work Policies

If you miss a test for any reason, the weight of that test will be moved to the final exam. You may miss at most one test. Subsequent missed tests will receive a mark of 0.

It is **your responsibility** to ensure that your quiz, tutorial, and assignment marks posted to Brightspace are correct within one week of the date the marks were released. Concerns or complaints about grading must be communicated (first to the teaching assistant, then, if the result is unsatisfactory, to the instructor) within that time. After one week, all marks are considered final and will not be changed under any circumstances.

## Collaboration Policy

★ There is absolutely no collaborating allowed for the tests.

Collaboration on assignments is encouraged.

## Academic Integrity

Assignments are for learning, not for marks. You may use any resource that helps you learn for an assignment.

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/>

All tests are expected to be completed individually, and without electronic aid; any communication or access of electronic devices (e.g. cellphones) during the test will be considered cheating. Use of Smart Glasses (or other similar assistive technologies) before or during a test is strictly prohibited and is considered an academic integrity violation. Even if you have prescription glasses with assistive technologies, you will not be allowed to use them during the test, so please make sure that you have acceptable prescription glasses. The proctor has the right to ask to inspect your glasses before or during the test. In addition, unless authorized with PMC accommodations, you are NOT allowed to use headphones nor ear buds during a test. Also, during a test, if you choose to wear a baseball cap, sunglasses or anything else that would prevent a proctor from monitoring where your eyes are focused during the test, you will likely be asked by a proctor to move to a different seat. Lastly, you must submit your test before leaving the classroom or it won't be graded.

If you are unsure of the expectations regarding academic integrity, then you must ASK your instructor.

## Additional Notes

In addition to the time spent attending lectures, students can expect to spend **between nine and twelve (9-12) hours per week** on this course. Students are responsible for all course materials, including lecture notes, and all materials discussed in class and on any of the official discussion boards.

Students are asked to pose all questions related to course content using **the official discussion boards on Brightspace**; students should not email the instructor directly unless the question contains **confidential information** or is of a personal nature.

The instructor will attempt to answer every student email received **within three business days** of the time the message was received, unless the email requests information already posted on Brightspace or in the course outline. To ensure that all announcements are received, students are expected to check their email on a daily basis.

All materials created for this course (including, but not limited to, lecture notes, in-class examples, assignments, examinations, and posted solutions) **remain the intellectual property of the instructor**. These materials are intended for the personal and non-transferable use of students registered in the current offering of the course. **Reposting, reproducing, or redistributing any course materials**, in part or in whole, without the written consent of the instructor, **is strictly prohibited**.

## SCS Computer Laboratory

SCS students can access one of the designated labs for your course. The lab schedule 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/technical-support>. Technical support is available in room HP5161 Monday to Friday from 9:00 until 17:00 or by emailing [SCS.Tech.Support@cunet.carleton.ca](mailto:SCS.Tech.Support@cunet.carleton.ca).

## 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 [scs.ug.advisor@carleton.ca](mailto:scs.ug.advisor@carleton.ca).

The undergraduate 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.

## Academic Accommodations

Full academic regulations and accommodations can be viewed here: [Academic Accommodations](#).

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