

People

Instructor	Prosenjit (Jit) Bose jit@scs.carleton.ca	HP5175	Office Hours: TBD
TA	TA info: https://brightspace.carleton.ca	Office TBD	Office Hours: TBD

Course Information

Class Time	Days: Tuesday & Thursday Time: 10:05 - 11:25
Course Website	https://brightspace.carleton.ca

Lectures will be given live and in class. Assignments should be typeset and uploaded to Brightspace. All questions pertaining to general course material can be asked on a discussion board in Brightspace.

Course Description

This course is an advanced course on the design and analysis of computer algorithms. Topics include: Randomized Algorithms, Graph Algorithms, Geometric Algorithms, Data Structures, Amortized Analysis and Approximation Algorithms.

Prerequisites

COMP 3804 or MATH 3804 or equivalent. **Cannot be taken if you took COMP4804 at Carleton.**

Reference Textbook

There is no required textbook for this course. All of the concepts taught in the class will have many freely available online references. As new topics are introduced in class, the online references will be provided. Also, my handwritten notes will be posted online.

Evaluation

4%	4 Assignments (Due dates: Sept 23rd, Oct 14th, Nov 6th, Nov 27th)
96%	3 Tests in class (Test dates: Sept 30th, Oct 30th, Nov 20th)
0%	Optional test in class on Dec 4th
100%	Total

Grades: Grades will be posted on Brightspace. Assignments are worth 1% each where students will receive 1% for submitting their best effort (No late assignments will be considered. I will elaborate more on this in class). On the last day of class (Dec 4th), there will be an optional 4th in-class test offered to any student that wishes to write it. Although the test is optional and weighted at 0% of the final grade, the grade from this optional 4th test will replace the lowest mark from the

first three tests (should the grade be higher than the lowest mark).

Collaboration Policy

★ There is absolutely no collaborating allowed for the tests.

There will be 4 assignments (worth 4%) to help students prepare for the tests and reinforce all the concepts taught in class. Students may use AI tools as a supplementary tool to help in clarifying challenging concepts or getting started on assignment questions. If you need additional help, please contact a TA or your instructor. Solutions to some assignment questions may be discussed in class or during office hours.

You are NEVER permitted to post, share, or upload course materials without explicit permission from your instructor. Academic integrity offenses are reported to the office of the Dean of Science. Information, process and penalties for such offenses can be found on the ODS webpage: <https://science.carleton.ca/students/academic-integrity/>

Additional Notes

Students are responsible for all course materials, including lecture notes, and all materials discussed in class. Students are asked to pose all questions related to course content using **the official discussion board on Brightspace**; the instructor (and TA) will review and attempt to answer all questions posted on the official discussion board within 24 hours. 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 is in the course outline. To ensure that all announcements are received, students are expected to check their Carleton email and the discussion board regularly.

Undergraduate Academic Advisor

The Undergraduate Advisor for the School of Computer Science is available in Room 5302 HP or can be contacted by email at 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.

University Policies

Full academic regulations are found in the University's calendar (<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>). 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/> Some excerpts are below.

Academic Integrity

Every student should be familiar with the Carleton University student academic integrity policy. If you have been accused of breaching the Academic Integrity Policy, your Faculty Dean will inform you by email and in writing of the nature of the charge, the evidence against you, the procedures to be followed. For details on the procedure and policy, see <https://carleton.ca/registrar/academic-integrity/>

Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Academic Accommodations for Students with Disabilities

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. Visit the PMC website: <http://carleton.ca/pmc>

Religious Obligations

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit <https://carleton.ca/equity/focus/discrimination-harassment/religious-spiritual-observances/>

.