

People

Instructor	M. Jason Hinek (HP5332)
Teaching Assistants	tba (see https://www.carleton.ca/culearn/)

Course Information

Classroom	Building: Southam Hall	Room: KM-TH
Class Times	Days: Tuesday & Thursday	Time: 10:05pm - 11:25pm
Course Website	https://www.carleton.ca/culearn/	
Course Discussion Group	https://www.carleton.ca/culearn/	

Course Description

This course is designed to give students an understanding of Discrete Mathematics and Discrete Structures. The primary focus is on the role these structures play in Computer Science. Computers handle discrete rather than continuous data. The course presents a basic overview of some of the main theoretical concepts. Topics include: propositional logic, predicate calculus, set theory, functions and relations, sequences and sums, complexity of algorithms, mathematical reasoning and proof techniques, recurrences, induction and graph theory. Material is illustrated through examples from computing.

Prerequisites

One Grade 12 university preparation mathematics course. Precludes additional credit for MATH 1800.

Reference Material

On the website ([Discrete Math Study Center](#)), you will find the following:

- Course Notes
- Video lectures (from Winter 2015)
- A database of solved problems pertaining to every topic presented in this course
- Sample tests and exams

Reference Textbook

Mathematics for Computer Science by E. Lehman, F.T. Leighton, and A.R. Meyer. ([free pdf](#)). This is a free textbook that contains an overview of most of the topics presented in this course.

Evaluation

20%	Five assignments due Jan 28, Feb 11, March 10, March 24, April 7 (tentative)
30%	Four in-tutorial tests during weeks of Feb 1 , Feb 22, March 14, March 28
50%	Final Exam (scheduled by the university)
100%	Total

Tests: Each test is 45 minutes long and must be written in the tutorial section that you are enrolled in. Test 4 is optional and your test grade (30%) will be determined by the best three of the four tests (with each test being 10%). **There are no make-up tests.** If you miss a test for a valid (and documented) reason, the weight of that test will be moved to the final exam.

Assignments: There will be five hand-written assignments that you will submit in the course drop box in HP 3155. **No late submissions will be accepted.**

Final Exam: The final exam will be three hours long. The time and location will be determined and announced by the university.

Appeals: Test appeals must be made within two weeks from the date that the test was returned to the class in tutorials. If you wish to appeal a test grade you should consult with the teaching assistant that graded your test first.

Appeals made after the two week period will be returned without consideration. (Simple arithmetic errors are the only exception to this rule. These will always be corrected no matter when they are reported.)

Grades: Marks will be posted on cuLearn. It is your responsibility to check cuLearn frequently (after each test is graded, for example) and make sure that your marks are correctly recorded. All marked assignments and tests should be retained by students as proof of completion and in case your grades appear differently on cuLearn.

Collaboration Policy

★ The is absolutely no collaborating allowed for the tests and final exam.

Collaboration on assignments is acceptable but only at the level of discussion. When writing down the solutions, please write them down on your own. If you need help, please see a TA or your instructor. Posting assignment solutions on discussion boards before the due date and time is also prohibited.

Note: Even though each test will cover specific topics, they are also cumulative. For example, Test 2 might involves proofs using propositional logic, Test 3 might involve proving things with sets, or Test 5 might involve an inductive proofs using sums or functions.

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 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 ([link](#)). Some excerpts are below.

Academic Integrity

Every student should be familiar with the Carleton University student academic integrity policy. A student found in violation of academic integrity standards may be awarded penalties which range from a reprimand to receiving a grade of F in the course or even being expelled from the program or University. Some examples of offences are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

Plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own. Plagiarism includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source.

In cases where an investigation determines that a violation of the Academic Integrity Policy has occurred, sanctions may be applied by the Faculty Dean, the Provost and Vice President (Academic), or by Senate Executive.

Sanctions may include but are not limited to completion of a remediation process, a written reprimand, assignment of a failing grade, withdrawal from a course, suspension from a program, suspension or expulsion from the university.

Students with Disabilities

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision.

If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and 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 me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable) at

<http://www2.carleton.ca/pmc/new-and-current-students/dates-and-deadlines/>

Religious Obligations

Carleton University accommodates students who, due to religious obligation, must miss an examination, test, assignment deadline, laboratory, or other compulsory event. The University has a Senate-approved policy on religious accommodation that forms part of its Human Rights Policy, available at:

<http://www2.carleton.ca/equity/>

Accommodation will be worked out directly and on an individual basis between the student and the in-

structor(s) involved. Students should make a formal written request to the instructor(s) for alternative dates and/or means of satisfying requirements. Such requests should be made during the first two weeks of any given academic term, or as soon as possible after a need for accommodation is known to exist, but in no case later than the penultimate week of classes in that term.

Pregnancy Obligation

Write to me 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 the Equity Services website: <http://www2.carleton.ca/equity/>

Medical Certificate

The following is a link to the official medical certificate accepted by Carleton University for the deferral of final examinations or assignments in undergraduate courses. To access the form, please go to <http://www.carleton.ca/registrar/forms/>
