

## Course Outline

### COMP 1405B for Winter 2021

Introduction to Computer Science I

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#### Course Information

Instructor: Mikhail Genkin

Contact: [michael.genkin@carleton.ca](mailto:michael.genkin@carleton.ca)

Classroom: Virtual classrooms will be set up on cuLearn and Slack

Lectures: Monday and Wednesday 16:05 to 17:25 EST via Zoom

Tutorials: Check your schedule on Carleton Central

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

#### Teaching Assistants

A list of teaching assistants and their contact/office hours information will be posted once the course starts.

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#### Course Calendar Description

A first course in programming for B.C.S. students emphasizing problem solving and computational thinking. Topics include pseudocode, variables, conditionals, iteration, arrays, objects, functions, sorting, searching, and simulation.

#### Required Textbook(s) and Other Resources

The following free, interactive, textbook will be used for the course:

<https://runestone.academy/runestone/books/published/thinkcspy/index.html>

Additional, optional, resources will be posted on the course site.

#### Topics Covered

This course will cover the following topics:

Week Of	Topics/Activities	Comments
Jan. 11	Course introduction What is computer science?	Course introduction topic will cover: <ul style="list-style-type: none"><li>• Course objectives</li><li>• Delivery model</li></ul>

	Variables	<ul style="list-style-type: none"> <li>• Collaboration tools and communication channels</li> <li>• On-line behaviour</li> <li>• Expectations</li> <li>• Student survey – time zones</li> </ul>
Jan. 18	Branching Functions	
Jan. 25	Scope Repetition	
Feb. 1	Modules Strings Assignment 1	Will be available via cuLearn. Deadline TBD.
Feb. 8	Strings Midterm	This will be a timed on-line test. The duration will equal the time allocated for one of the lecture slots. The exact due date will be established once the course starts, to accommodate students in different time zones if necessary.
Feb. 15	Winter Break	No classes, tests or assignments.
Feb. 22	Lists Files	
Mar. 1	Operators Dictionaries	
Mar. 8	Objects Search	
Mar. 15	Sorting	
Mar. 22	Exceptions Recursion Assignment 2	Will be available via cuLearn. Deadline TBD.
Mar. 29	Debugging Extra topics Prep for final exam	
April 16 to 27	Final exam	This will be an on-line timed exam. Exact timing TBD. An effort will be made to accommodate students in different time zones.

## Assessment Scheme

The following marking scheme will be used for this course:

Activity	Weight(%)	Comments
Tutorials	15	Successful completion of each tutorial is needed to get the grade for the tutorial.
Assignments	20	There will be 2 assignments, each worth 10% of the final grade. Assignments will be posted on cuLearn.
Midterm	20	This will be an on-line examination. Due to the on-line format, and the potential of students being in multiple time-zones, the exact timing will be determined after the course is started, but it will be held during the week of Feb. 8.
Final exam	30	This will be an on-line examination held during the examination period. Timing is TBD.
Class participation	15	To get full marks for class participation students are expected to: <ul style="list-style-type: none"><li>• Attend lectures and Q&amp;A time</li><li>• Keep video on during lecture and Q&amp;A to encourage a sense of community with peers</li><li>• Participate in on-line discussions on Slack, Zoom and other collaboration tools as required</li><li>• Completing all of the assigned tutorials</li><li>• Polite, professional and courteous on-line interactions with the instructor, TAs and other students</li></ul>

This course will be delivered on-line, using the blended delivery model. The course will be organised in modules. The modules may be pre-recorded or may be recorded during the class lecture time. In either case the class lecture time will be used for interactive question and answer.

It is important to note that although 15% of the grade is awarded for class participation, each student is expected to complete the assigned tutorials, assignments, midterm, and final exam individually. Students should feel free to ask questions pertaining to course material on-line via established communication channels for the course but should not share solutions to assignments and tests.

If you are unsure of the expectations regarding academic integrity (how to use and cite references, how much collaboration with lab- or classmates is appropriate), ASK your instructor. Sharing assignment or quiz specifications or posting them online (to sites like Chegg, CourseHero, OneClass, etc.) is 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. Penalties for such offences can be found on the ODS webpage: <https://science.carleton.ca/academic-integrity/>.

## Important Considerations

Late assignments are never accepted for any reason. Assignments submissions are handled electronically (i.e., through cuLearn) and there is no "grace period" with respect to a deadline - an assignment submitted even one minute after the deadline is late and will receive a mark of zero.

Technical problems do not exempt you from this requirement, so if you wait until the last minute and then have issues with your connection, you will still receive a mark of zero. Consequently, you are advised to:

Periodically upload your progress (e.g. upload your progress at least daily), and attempt to submit your final submission at least one hour in advance of the due date and time.

For each assignment, you will be submitting one or more files that contain source code, and these files must be given the correct filename and be provided in the specified format. Assignments that are incorrectly named or in the incorrect format will be penalized and may receive a mark of zero.

If any of the source code files you submit does not run, it will receive a mark of zero. Consequently, after you upload your submission to cuLearn you should re-download it immediately and ensure that:

- your submission is the correct file type and has the correct filename
- each of your source code files can be run from the terminal on our official virtual machine
- each of your source code files can be viewed in a text editor (for marking purposes)

You are expected to demonstrate good programming practices at all times and your code may be penalized if it is poorly written. You are also expected to do the necessary preparatory work (i.e., devising an algorithm) before you start coding. You may be asked to present either pseudocode or a flowchart before you will receive any assistance from the instructor or a teaching assistant.

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## 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](mailto: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 Writing Tutorial Services.

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

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## University Policies

For information about Carleton's academic year, including registration and withdrawal dates, see [Carleton's Academic Calendar](#).

**Pregnancy Obligation.** 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 [Equity Services](#).

**Religious Obligation.** 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 [Equity Services](#).

**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](mailto: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. For more details, visit the [Paul Menton Centre](#) website.

**Survivors of Sexual Violence.** As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: [carleton.ca/sexual-violencesupport](http://carleton.ca/sexual-violencesupport)

**Accommodation for Student Activities.** Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. 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, see [the policy](#).

**Student Academic Integrity Policy.** 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. Examples of punishable offences include: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found [here](#).

**Plagiarism.** As defined by Senate, "plagiarism is presenting, whether intentional or not, the ideas, expression of ideas or work of others as one's own". Such reported offences will be reviewed by the office of the Dean of Science.

**Unauthorized Co-operation or Collaboration.** Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not co-operate or collaborate in the completion of an academic assignment, in whole or in part, when the instructor has indicated that the assignment is to be completed on an individual basis". Please refer to the course outline statement or the instructor concerning this issue.