COMP1001B - Introduction to Computational Thinking for Arts and Social Sciences
School of Computer Science, Carleton University
Winter 2020 - Course Outline

Administrative details

Instructor: Riham Mohamed riham.mohamed@carleton.ca

Class Times: Wednesdays and Fridays, 4:05 pm – 5:25 pm

Classroom: Azrieli Theatre Building, Room 102

Teaching assistants:

Eric Spero ericspero@cmail.carleton.ca
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Course website and office hours: https://www.carleton.ca/culearn/

Course Information

Course Description

An introductory course intended to give students in the Arts and Social Sciences a working knowledge of computers and their applications. Students will gain computational thinking skills by exploring data representation, basic programming concepts, a selection of algorithms, and advanced usage of software packages for the arts and social sciences.

Learning outcomes

If a student attends every lecture and completes every assignment and practice problems, then by the end of this course the student should be able to:

- Understand what computer science is and identify how it can help solve problems
- Explain the difference between *designing* and *implementing* an algorithm in source code
- Use the following to solve practical computing problems in the arts and social sciences:
    - Data types, boolean values, variable assignment, and propositional logic
    - Branching, repeating/looping, and nested control structures
    - Functions and lists
- Apply computational thinking skills when working with common software packages (e.g., Word processors, Excel)

Textbook

Readings will be assigned from the following online textbook:

http://do1.dr-chuck.com/pythonlearn/EN_us/pythonlearn.pdf

Evaluation

Your performance in this course is assessed using several components. These include **four assignments**, **one in-class midterm** (date TBD), and **a final examination** (to be scheduled by the university). The grades you achieve on these components will be weighted with the following scheme:

Component	**Weight**
Assignments (4)	45% (Each assignment is worth 11.25%)
Midterm	25%
Final exam	30%

All assignments are mandatory. You will use **cuLearn to submit** your assignments and **you must ensure that the marks posted to cuLearn are correct within one week of the date the assignment grading was completed.** Concerns or complaints about the grading of the assignments must be communicated to the teaching assistant who graded your assignment within that time – **after one week, no assignment remarking is possible.**

Collaboration Policy

Collaborating on assignments is strictly disallowed. You must complete the work by yourself. 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.

Assignment Submission

Late assignments are accepted for 24 hours after the posted deadline, but they incur a penalty of 0.5% / hour. Submissions are handled electronically, so there is no "grace period" with respect to the deadline - 24 hours after the official submission deadline, you will not be able to submit your work.

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 penalty. You are advised to:

- Periodically upload you progress (i.e., upload partially completed submissions)
- Attempt to submit your final submission at least 30 minutes in advance of the due date and time
- Download your submission and verify the contents after submitting

For each assignment, you will be submitting one or more files that contain source code. These **files must be compressed into a "zip" file**. If you do not compress your source code files or if you compress your files into another format (e.g., "rar", "tar", etc.), then your assignment will be rejected and will receive a mark of zero.

If a source code file you submit does not run it may receive a mark of zero. After you upload your submission to cuLearn you should re-download it immediately and ensure that:

- Your submission is a "zip" file that is not corrupt (i.e., it can be opened properly)
- Each of your source code files can be run from a command line in Windows without error
- Each of your source code files can be viewed in a text editor (for marking purposes)

You are expected to demonstrate good programming practices (which we will discuss in class) 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.**

Additional Notes

Questions/Forum/Email

Students are asked to pose all questions related to course content using the official discussion boards on cuLearn. The instructor will attempt to answer every student question or email received within 48 hours of the time the message was received, unless the email requests information already posted on cuLearn or in the course outline.

All emails regarding the course should be sent from your Carleton email account. To ensure that all announcements are received, students are expected to check their Carleton email on a daily basis.

All materials created for this course (including, but not limited to, lecture notes, in-class examples, practice problems, 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 Accounts

Any student taking an SCS course qualifies to have an SCS account. SCS accounts can be created at the following URL: http://www.scs.carleton.ca/newacct. SCS students can access one of the designated labs for your course. The labs are operational 7 days a week 24 hours per day, please be advised that the building will be closed overnight, Mon. – Fri. 23:00 – 8:00 and on weekends from 17:00 – 8:00. Technical support is available in room HP5161 Monday to Friday from 9:00 until 17:00. All SCS account related information is accessible at the following URL: http://www.scs.carleton.ca/nethelp.

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

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. Some examples of offences are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

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.

Academic Accommodations for 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*). **Requests made within two weeks will be reviewed on a case-by-case basis.** After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website (www.carleton.ca/pmc) for the deadline to request accommodations for the formally-scheduled exam (*if applicable*).

Religious 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/

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