## **COMP 1001A**



## Introduction to Computational Thinking

Course Outline for Winter2024

## **Course Details**

Instructor: Leila Chinaei < leilachinaei@cunet.carleton.ca>

Lectures: Mondays and Wednesdays 10:05 am – 11:25 am See Carleton Central for the location.

Teaching Assistants and Office hours: Information will be posted on Brightspace

## **Course Calendar Description**

An introductory course in computer science and programming for Arts and Social Science students. This course emphasizes logic, problem solving and computational thinking using a friendly, high-level language with emphasis on creating computer graphics. Topics include data representation, logic, programming fundamentals (sequence, selection repetition), abstraction, modularity, debugging, and some light algorithms. Content to include Python, Excel, and optionally an introduction to HTML/CSS/Javascript.

## **Learning Modality**

All classes will be held synchronous and in person. Most classes will be live lectures. Other classes might be discussion of posted pre-recorded lectures or live coding examples.

## Communication

The majority of communication will be using our class discord server. All questions about the course should be posted there.

You should only email the instructor or a teaching assistant if the contents of the email are personal. Do not send private direct messages to the course teaching team on discord unless asked to do so. All emails must be sent from your university **cmail** account. Any email should have "COMP1001" in the subject along with something related to the content of the email.

**Territory Acknowledgment:** Carleton university acknowledges the location of its campus on the traditional unceded territories of the Algonquin nation.

### **Assessment**

Assignments: 5 main assignments (8% each)	40%
<b>Quizzes:</b> two <b>in-class</b> quizzes (15% each): Wednesday February 14th and Wednesday March 20 <sup>th</sup> . These will be written in-person in the classroom.	30%
Final Exam (Date TBA by university)	30%

Your performance in this course is assessed using several components. These include five (5) assignments, two (2) quizzes, and a final examination (scheduled by the registrar). Final grades will be determined using the scheme described above, and no extra credit assignments will be provided under any circumstances.

### **Assignments**

Assignments are **mandatory** and will be submitted electronically (details will be given in class). The assignment component of your final grade is computed from the score you receive on each assignment. You are expected to work on your assignments consistently once they are released (uploading your progress at least daily).

All assignments (except assignment 5 which is due on Thursday) are due on **Friday at 11:59pm**. There will be a 48-hour grace period for each assignment, and you are allowed to submit during the grace period as described on the assignment.

Submission after the grace period will receive zero.

Assignments tentative due dates are as follows: A1 due on Jan. 26<sup>th</sup>, A2 due Feb. 9<sup>th</sup>, A3 due Mar. 1<sup>st</sup>, A4 due Mar. 15<sup>th</sup> and A5 due Apr. 5<sup>th</sup>.

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 (i) periodically upload your progress (i.e., upload partially completed submissions), (ii) attempt to submit your final submission at least 1 hour in advance of the due date and time, and (iii) download your submission and verify the contents after submitting.

You may speak with TA's or the instructor if you need help and are encouraged to discuss things with other classmates. But, you must write your own responses and code. Do not post or share solutions or partial solutions with anyone. A breakdown of each assignment (due date) is provided in the timetable in Brightspace.

### Quizzes

Quizzes are **mandatory** and will be written, in person, during the regular scheduled class times.

#### **Appeals**

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

# **Final Exam Scheduling**

The final exam will be written in person. The examination period is April 13 - 25. The time for our exam will be announced by the University. Be sure that you are not in transit during this period of time. Travel plans are not an excuse to miss the final exam.

# **Software Requirements**

We will be using Python (version 3.x) as our programming language. You can download and install the latest version of python from <a href="https://www.python.org/">https://www.python.org/</a>. We will also be using VS Code as our Integrated Development Environment (IDE) in class. You are free to use whichever IDE you prefer but the TAs will only help with VS Code. Instructions for installing can be found in our Brightspace page (<a href="https://brightspace.carleton.ca/d2l/home/143719">https://brightspace.carleton.ca/d2l/home/143719</a>).

We will be using Microsoft Excel in the course. As a Carleton student you can download this for free. See <a href="https://carleton.ca/its/help-centre/get-microsoft-office-for-students/">https://carleton.ca/its/help-centre/get-microsoft-office-for-students/</a> for instructions.

## **Textbook**

There are no official textbooks for this class. As a resource you may use the following online textbook: <u>How to Think Like a Computer Scientist</u>. Another great resource is <u>w3schools Python section</u>.

Additional notes/videos may be posted to Brightspace.

## **SCS Laptop Requirement**

Everyone enrolled in a 1st year COMP course after the 2020/21 school year is required to have a laptop. This applies to students enrolled in a 1st year COMP course, which includes COMP1001, 1005 and 1006. For more information, please visit SCS Laptop Requirement - School of Computer Science (carleton.ca).

As a student at Carleton, you will have access to several lab spaces with computers and software applications. Please visit the following for the lab information:

https://carleton.ca/its/all-services/computers/student-computer-labs/

## **Undergraduate Academic Advisors**

The Undergraduate Advisors for the School of Computer Science are available in Room 5302C HP; or by email at scs.ug.advisor@cunet.carleton.ca .

The undergraduate advisors can assist with information about prerequisites and preclusions, course substitutions/equivalencies, understanding your academic audit and the remaining requirements for graduation. The undergraduate advisors will also refer students to appropriate resources such as the Science Student Success Centre, Learning Support Services and 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 offenses are: plagiarism and unauthorized co-operation or collaboration. Information on this policy may be found in the Undergraduate Calendar.

### Plagiarism/Unauthorized Co-operation or Collaboration

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

Senate policy states that "to ensure fairness and equity in assessment of term work, students shall not cooperate 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".

For more information about the consequences of academic violations, please read <a href="https://science.carleton.ca/academic-integrity/">https://science.carleton.ca/academic-integrity/</a>

### **Academic Accommodations**

#### **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:

#### **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 the Equity Services website: <a href="mailto:carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf">carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf</a>

#### **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 is 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: <a href="mailto:carleton.ca/sexual-violence-support">carleton.ca/sexual-violence-support</a>

#### **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 the Equity Services website: <a href="mailto:carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf">carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf</a>

#### **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. carleton.ca/pmc

#### **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. <a href="https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf">https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf</a>

For more information on academic accommodation, please contact the departmental administrator or visit: <a href="mailto:students.carleton.ca/course-outline">students.carleton.ca/course-outline</a>