

# Introduction to Computer Science II

COMP 1006/1406 A - Winter 2025 (Preliminary Version)

School of Computer Science, Carleton University

## Course Details

Instructor: Jason Hinek < firstName lastName (at) cunet dot carleton dot ca >

Lecture times: Tuesday & Thursday , 11:35am-12:55pm (Check Carleton Central for location)

Tutorials: Check Carleton for times and locations

Lab Coordinator and Teaching Assistants: Lab coordinator and a list of teaching assistants and their contact times will be posted on Brightspace when the course starts.

**Course Website:** Check our Brightspace page for more information.

**Important dates and deadlines:** Check the following website for fall/winter breaks, statutory holidays, etc.

(<https://carleton.ca/registrar/registration/dates/academic-dates/>)

Note: Winter break is February 17-21 (there are no classes).

## Learning Modality

This is an in-person class. Classes, midterm exams, and the final exam are all held in-person (see Carleton Central for class location; final exam will be set by the Registrar's office).

Note: Some classes may be held online using Zoom (live or pre-recorded videos) in special circumstances (such as instructor illness or inclement weather).

## Course Calendar Description

A second course in programming [for BCS students], emphasizing problem solving and computational thinking in an object-oriented language. Topics include abstraction, mutable data structures, methods, inheritance, polymorphism, recursion, program efficiency, testing and debugging.

Precludes additional credit for COMP 1006/1406, SYSC 1101 (no longer offered), SYSC 2004.

Prerequisite(s): one of COMP 1405, COMP 1005, ECOR 1606, SYSC 1005, BIT 1400.

## Learning Outcomes

Upon successful completion of COMP1006/1406, students should be able to:

- Implement object-oriented computer programs using the Java programming language
- Understand and effectively apply the key principles of object-oriented programming:
  - encapsulation, abstraction, inheritance, and polymorphism
- Understand the basic memory model of Java programs
- Work with abstract data types to solve problems
- Apply exception handling to build fault-tolerant programs
- Save data to and load data from files
- Understand the Model-View-Controller framework

A schedule of topics for each week will be posted online once the course starts.

## Land Acknowledgement

Carleton University acknowledges the location of its campus on the traditional, unceded territories of the Algonquin nation. In doing so, Carleton acknowledges it has a responsibility to the Algonquin people and a responsibility to adhere to Algonquin cultural protocols.

## Assessment

<b>Assignments:</b> 5 main assignments + 2 midterm assignments	42%
<b>Tutorials:</b> weekly	8%
<b>Midterm tests:</b> two in-class tests; <b>Thursday February 6th</b> and <b>Thursday March 13th</b>	30%
<b>Final Exam</b> (Date TBA by university)	20%

## Assignments

Assignments will mostly involve writing Java code but may also include some written tasks.

The majority (if not all) of the *coding marks* will be based on the **correctness** of your code. All submitted code must **compile** and **run** in order to receive any correctness grades (for that question). Code that **breaks** any marking programs will receive zero correctness marks. Code that runs too long (and crashes the marking program) will receive zero correctness marks.

All assignments are due on Fridays at 11:59pm. However, there is a grace period of 48 hours for each assignment. That is, you can submit up to 48 hours late without penalty. Note that there

will be no office hours or available help during this 48 hour time though.

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 the assignment schedule will be given when classes start.

If your Assignment 1 is your lowest grade, it will be removed and the remaining four assignments will make up your entire 40% (10% each). Otherwise, each assignment is worth 8% of your final grade. No other assignment will be dropped.

Midterm assignments will be due on the day of your midterm tests. These assignments are ***proof-of-study exercises***. More details of the midterm assignments will be given in class.

## Tutorials

Tutorials will be held in-person. You can work alone or choose to work with others collaboratively. Tutorial grades will be based on either a tutorial quiz (Brightspace) or submitted code (Gradescope). There is no attendance grade (so attendance is optional), but this is a chance to get live help on the material from a teaching assistant.

## Midterm Tests

The two midterm tests will be written in class during class time. You will write code (using pencil and paper) and answer short questions about the course content.

If you do better on the second midterm (compared to the first), the second midterm grade will be used in place of your first (this does NOT work in the opposite order). A missed first midterm will receive a grade of zero.

If you miss the second midterm, the weight of the midterm will be shifted to the final exam.

If you miss both midterms then your final exam will be written (and not multiple-choice and/or multi-select)

## Appeals

You have 1 week (from when grades are posted) to verify the correctness of your grades. You must make a grade appeal in Gradescope to seek a correction. Note that this is based on the release date of the grade and not the date you view them. No appeals will be accepted after this 1 week period.

## Final Exam Scheduling

The time for our exam will be announced by the University. Be sure that you are available for the exam time. Travel plans are not an excuse to miss the final exam.

## Attendance

You must be present for both midterm tests and the final exam.

## Workload

The expected workload is high. In typical offerings of this course, it is expected that students in this course will spend an average of 10 hours or more each week on this course.



This course has a high workload. It is expected that you will spend 10 or more hours per week (on average) throughout the term.



## Textbook

Content for this course will come from posted course slides/notes.

Supplemental material will come from Dr. Lanthier's Notes which are freely available at <http://people.scs.carleton.ca/%7Elanthier/teaching/COMP1406/notes.html>

Additional notes/videos/links may be posted to Brightspace. Any additional material are freely available,

## Important Dates

See the University Calendar for all important dates:

<https://carleton.ca/registrar/registration/dates/academic-dates/#sect4>

## Academic Integrity

<TL;DR> Don't cheat.

This course has no group component, unless otherwise specified, and so all deliverables should be completed and submitted individually. Unless it is explicitly stated otherwise, the use of any A.I. systems will be considered academic misconduct. This includes, but is not limited to, chatbots (e.g., ChatGPT, Google Bard, Bing Chart, etc.), research assistants (e.g., Elicit), and image generators (e.g., Stable Diffusion, Dall-E, etc.), etc. Note that the above rule does not hold for automated grammar and punctuation checking tools (such as Grammarly).

To help enforce this policy, students may be randomly selected after each deliverable (Assignment or Challenge) to explain their code/work to the TAs/instructor in a one-on-one session.

In addition, sharing assignment, challenge, quiz, midterm or final exam specifications or posting them online (to sites like Chegg, CourseHero, OneClass, etc.) is ALWAYS considered academic misconduct. You are NEVER permitted to post, share, or upload course materials without explicit permission from your instructor.



Different technologies may be used to detect plagiarism of submitted code.



For more information about academic integrity please see <https://science.carleton.ca/students/academic-integrity/>

## Undergraduate Academic Advisor

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

## SCS Laptop Requirement

Every student that has been enrolled in a 1000-level (i.e., first year) course offered by the School of Computer Science after the 2020/2021 school year is required to have a laptop. This includes COMP1001, COMP1005, and COMP1006. For more information, please visit <https://carleton.ca/scs/scs-laptop-requirement/> and then review the requirements at <https://carleton.ca/scs/scs-laptop-requirement/laptop-specs/>.

## SCS Computer Laboratory

Students taking a COMP course can access the SCS computer labs. The lab schedule and location 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/tech-support/>. Technical support staff may be contacted in-person or virtually, see this page for details: <https://carleton.ca/scs/tech-support/contact-it-support/>

# 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 sanctioned with penalties which range from a reprimand to receiving a grade of F in the course, or even being suspended or expelled from the University. Examples of punishable offences include plagiarism and unauthorized collaboration. Any such reported offences will be reviewed by the office of the Dean of Science. More information on this policy may be found on the ODS Academic Integrity page: <https://carleton.ca/registrar/academic-integrity/>.

## 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. More information and standard sanction guidelines can be found here: <https://science.carleton.ca/students/academic-integrity/>.

## Unauthorized 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".

## Academic Accommodations

Carleton is committed to providing academic accessibility for all individuals. Please review the academic accommodation available to students here: <https://students.carleton.ca/course-outline/>.