

ICT 602 403 220-6015 cpsc@cpsc.ucalgary.ca

### CPSC 217 - INTRODUCTION TO COMPUTER SCIENCE FOR MULTIDISCIPLINARY STUDIES I - SUMMER 2025

### COURSE OUTLINE

The University of Calgary, located in the heart of Southern Alberta, both acknowledges and pays tribute to the traditional territories of the peoples of Treaty 7, which include the Blackfoot Confederacy (comprised of the Siksika, the Piikani, and the Kainai First Nations), the Tsuut'ina First Nation, and the Stoney Nakoda (including Chiniki, Bearspaw, and Goodstoney First Nations). The City of Calgary is also home to the Métis Nation of Alberta (Districts 5 and 6).

#### A. Course Information

1. Course Coordinator(s)

Not Applicable

- Lecture
- 2. Section(s)

#### Lecture 02 : MWF 09:00 - 12:00 - Online

Instructor	Email	Phone	Office	Student/Office Hours
Dr. Jonathan Hudson	jwhudson@ucalg	jary.ca N/A	ICT 712	After class MonWedFri

### Lab and Tutorial

3. Sections

Tut 01 TR 09:00 - 12:00 in MS 119 Tut 02 TR 09:00 - 12:00 - Online

#### 4. Scheduled Out-Of-Class Activities

There are no scheduled out of class activities for this course.

#### Additional Course Delivery

#### 5. Details

This web-based L02 runs conjoined with the in-person L01.

The in-person lectures are broadcast via zoom live and recorded. The tutorial first L01 is in-person but the tutorial for L02 is independently delivered and is zoom-based.

The assignments are the same assignment submitted via D2L. Exams will be D2L assessments in L02 unlike the in-person assessments in L01.

If you are a L02 attendee who has interest in the in-person delivery variant of the course, please contact the instructor to see if we can make that happen for you (particularly exams and lectures may be the easiest to invite you to join in-person).

**Online Delivery Details:** 

This course is being offered online in real-time via scheduled meeting times, you are required to be online at the same time.

To help ensure Zoom sessions are private, do not share the Zoom link or password with others, or on any social media platforms. Zoom links and passwords are only intended for students registered in the course. Zoom recordings and materials presented in Zoom, including any teaching materials, must not be shared, distributed or published without the instructor's permission.

Lectures and tutorials will be synchronous at their scheduled times. Synchronous lectures and tutorials will be recorded for later viewing but will not be developed for the purpose of being viewed asynchronously. (Some activities such as tutorial exercises may be able to be completed asynchronously.)

The midterm and final will be synchronous through D2L. For any synchronous assessment, time will be adjusted for SAS students if needed and accommodations for students will be done on a case-by-case basis.

#### Course Site &

#### 6. Materials

D2L: CPSC 217 S25-Introduction to Computer Science for Multidisciplinary Studies I

https://cspages.ucalgary.ca/~jwhudson/CPSC217S25/

Technology:

In order to successfully engage in their learning experiences at the University of Calgary, students taking online, remote and blended courses are required to have reliable access to the following technology:

- A computer with a supported operating system, as well as the latest security, and malware updates;
- A current and updated web browser;
- Webcam/Camera (built-in or external);
- Microphone and speaker (built-in or external), or headset with microphone;
- Current antivirus and/or firewall software enabled;
- Stable internet connection.

For more information please refer to the UofC ELearning online website.

No textbook is required for the course and no assessments will reference the textbook.

The students will benefit from having a computer capable of installing Python 3 and running Python 3 programs, but it is not required.

#### Helpful Resources:

Ben Stephenson, The Python Workbook: A Brief Introduction with Exercises and Solutions, 2nd Ed.: Springer.

### Approved Mandatory & Optional Course Supplemental

### 7. **Fees**

There are no mandatory or optional course supplemental fees for this course.

#### 8. Requisites

See section <u>3.5.C</u> in the Faculty of Science section of the online Calendar.

#### Course Learning

#### 9. Outcomes

- Apply the principles of top-down design, problem decomposition, and stepwise refinement to design solutions to small-scale computational problems.
- Read, trace the execution, and determine the outcome of programs developed using constructs including basic data types, assignment
  of variables, expressions, conditional statements, iterative statements, functions, arrays/lists and file input/output.
- Create and debug programs that make effective use of constructs including basic data types, assignment of variables, expressions, conditional statements, iterative statements, functions, arrays/lists and file input/output.
- Develop a client that makes use of external modules, libraries, or application programming interfaces.
- Describe and summarize the roles of programming and computing in a broader context of topics that may include scientific and nonscientific computing, data storage and analysis, established sub-disciplines of computer science, history of computing, or social and philosophical issues.

#### B. Assessment and Evaluation Information

#### 1. Assessment Components

The University policy on grading and related matters is described in F.1 and F.2 of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

Component	Weight	Due Date	Modality	Location
Assignment 1	6%	Jul 08 2025		
Midterm	30%	Jul 14 2025 at 09:00 am (90 Minutes)	online	D2L
Assignment 2	8%	Jul 15 2025		
Assignment 3	8%	Jul 22 2025		
Assignment 4	8%	Jul 29 2025		
Final Exam (dual-credit course that ends July 30th)	40%	Jul 30 2025 at 09:00 am (120 Minutes)	online	D2L

Each of the above components will be given a letter grade using the official university grading system (see section F.1.1). The final grade will be calculated using the grade point equivalents weighted by the percentages given above and then converted to a final letter grade using the official university grade point equivalents.

### Assessment &

#### 2. Grading

All students will write the midterm and final exam at the same time. The midterm is designed to take 1 hour and 30 minutes. The final is designed to take 2 hours.

In order to obtain a final grade of C- or better in the course, a student must achieve a weighted average of C- (1.7) or better on the midterm and final exams. Failure to earn a C- weighted average on the exams will result in a grade of D+ or less in the course. Please be advised that an average grade of C on the midterm exams combined with a grade of D+ on the final exam does not result in a C- weighted average across the exams because the final exam is weighted more heavily than the midterms.

Students who achieve a higher grade on the final exam than on one or both of the midterm exams will have their lower midterm exam grade(s) replaced with their final exam grade.

#### Reappraisal of Graded Term Work and Final Grades:

See <u>Section I</u> of the University Calendar and <u>https://science.ucalgary.ca/current-students/undergraduate/program-advising/grade-reappraisals-and-appeals</u>.

### Examination

# 3. Policy

The midterm and final exam will be synchronous, timed web-based D2L assessments web-based D2L assessments. The midterm and final exam are individual assessments with no aids, discussion, or collaboration allowed with classmates or others. (If you have an CBE IPP (Individual Program Plan) let me know so we can get you similarly set up at with Accessibility Services.)

See also Section G of the Calendar, on Academic Assessments and Examinations.

#### Missed Components of Term

4. Work

The first option for students who miss the midterm exams due to an excused absence will be a common deferred exam. The second option will be to have the weight of the missed exam transferred to the final exam. An excused absence will only be granted if it is requested ahead of the exam (or as soon after the exam as is practical in the circumstances if an absence could not have reasonably been requested before the exam) and is supported by appropriate documentation.

Students should contact the course instructor to negotiate alternative arrangements related to missed assignments. In most cases, the alternative arrangement will be a deadline extension. An extension will only be granted if it is requested ahead of the deadline (or as soon after the deadline as is practical in the circumstances if an extension could not have reasonably been requested before the deadline) and is supported by appropriate documentation.

See also Sections G2.3 and M.1.1 of the Calendar, on Absence from In Course Assessments and Supporting Documentation for Absences.

#### C. Course Policies & Procedures

#### Equity Diversity &

### 1. Inclusion

The University of Calgary is committed to creating an equitable, diverse and inclusive campus, and condemns harm and discrimination of any form. We value all persons regardless of their race, gender, ethnicity, age, LGBTQIA2S+ identity and expression, disability, religion, spirituality, and socioeconomic status. The Faculty of Science strives to extend these values in every aspect of our courses, research, and teachings to better promote academic excellence and foster belonging for all.

#### 2. Course Communication

Students must use their U of C account for all course correspondence.

Course communication policy: An optional community discussion platform will be used for the semester (Discord). You are not required to participate and no information or assessment will occur using the platform. We will reply to the discussion board, post notices, and send emails between 8:30am-4:30pm on Monday-Friday. We will do our best to read and respond to posts/emails within 24 hours Monday-Friday, and those received during the weekend by the end of the following Monday. If you do not receive a response within this time frame, please follow up in email (sometimes emails or discussion posts are lost in spam filters or mistakenly overlooked!).

### Academic Integrity and

#### 3. Misconduct

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. Research integrity, ethics, and principles of conduct are key to academic integrity. Members of our campus community are required to abide by our institutional <u>Code of Conduct</u> and promote academic integrity in upholding the University of Calgary's reputation of excellence. Some examples of academic misconduct include but are not limited to: posting course material to online platforms or file sharing without the course instructor's consent; submitting or presenting work as if it were the student's own work; submitting or presenting work in one course which has also been submitted in another course without the instructor's approval; falsification/fabrication of experimental values in a report. Please read the following to inform yourself more on academic integrity:

Student Handbook on Academic Integrity <u>Policy</u> and <u>Procedure</u> for Student Academic Misconduct <u>Faculty of Science Academic Misconduct Process</u> <u>Research Integrity Policy</u>

Additional information is available on the Student Success Centre Academic Integrity page

#### Acceptable & Prohibited Tools and

4. Resources

For assignments extremely limited use of generative AI in writing assistance is acceptable. For example, grammar suggestion, or code single line code-completion tools for programming. Programming or text that is more than minimally generative AI produced is not allowed. Learners are ultimately accountable for the work they submit. Use of AI tools must be documented in an appendix for the assignment. The documentation should include what tool(s) were used, how they were used, and how the results from the AI were incorporated into the submitted work. Failure to cite the use of AI generated content in an assignment will be considered a breach of academic integrity and subject to Academic Misconduct procedures.

# Writing Across the

## 5. Curriculum

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where appropriate, members of faculty can and should use writing and the grading thereof as a factor in the evaluation of student work. The services provided by the <u>Writing Support</u>, part of the <u>Student Success Centre</u>, can be utilized by all undergraduate and graduate students who feel they require further assistance. See also <u>Section E.2</u> of the University Calendar.

#### Academic

### 6. Accommodations

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The student accommodation policy can be found at: <u>https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf</u>

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: <a href="https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf">https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf</a>

Students needing an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, by filling out the <u>Request for Accommodation in Academic Courses Form</u> and sending by email to <u>science@ucalgary.ca</u> preferably 10 business days before the due date of an assessment or scheduled absence.

#### Instructor Intellectual

### 7. Property.

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<u>ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy</u>) and requirements of the copyright act (<u>laws-lois.justice.gc.ca/eng/acts/C-42/index.html</u>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

### Recording of

# 8. Lecture

Audio recording of lectures, other than where an audio recording is an accommodation, shall be permitted for individual private study only at the discretion of the instructor. For any other use, whether by duplication, transcription, publication, sale or transfer of recordings, written approval must be obtained from the instructor for the specific use proposed. Any use other than that described above constitutes academic misconduct and may result in suspension or expulsion. For more information, see <u>Section E.6</u> Recording of Lectures of the University Calendar.

#### Freedom of Information &

### 9. Privacy

This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). Students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see Legal Services website.

#### Human & Living Organism Studies

#### 10. Statements

Students will not participate as subjects or researchers in human studies.

See also Section E.5 of the University Calendar.

#### D. Copyright Legislation

All course materials (including those posted on the course D2L site, a course website, or used in any teaching activity such as (but not limited to) examinations, quizzes, assignments, laboratory manuals, lecture slides or lecture materials and other course notes) are protected by law. These materials are for the sole use of students registered in this course and must not be redistributed. Sharing these materials with anyone else would be a breach of the terms and conditions governing student access to D2L, as well as a violation of the copyright in these materials, and may be pursued as a case of student academic or <u>non-academic misconduct</u>, in addition to any other remedies available at law.

#### E. Support & Resources

Student well-being and safety resources that are not course-specific can be found on the Office of the Registrar's website: <a href="https://www.ucalgary.ca/registrar/registration/course-outlines">https://www.ucalgary.ca/registrar/registration/course-outlines</a>

# **Department Approval**