UNIVERSITY OF CALGARY
FACULTY OF SCIENCE

Department of Computer Science
ICT 602
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CPSC 231 - INTRODUCTION TO COMPUTER SCIENCE FOR COMPUTER SCIENCE MAJORS I - SPRING 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

2. **Lecture Section(s)**

   Lecture 01 : TR 13:00 - 15:45

Instructor	*Email*	*Student/Office Hours*
Office time James Tam	tam@ucalgary.ca	Monday and Wednesday: 4:00 - 4:30 PM via a Zoom link

3. **Lab and Tutorial Sections**

Tut 01 MW 12:00 - 13:50	Tut 03 TR 10:00 - 11:50

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

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

5. **Additional Course Delivery Details**

   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.

   This course will be taught remotely using Zoom.

6. **Course Site & Materials**

   D2L: CPSC 231 spring 2025

   Recommended Textbook(s):
   Cay S. Horstmann, Rance D. Necaise ,*Python for Everyone*: Wiley.

   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.

7. **Approved Mandatory & Optional Course Supplemental Fees**

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

8. **Requisites**

See section 3.5.C in the Faculty of Science section of the online Calendar.

Prerequisite(s):

Admission to Computer Science, Bioinformatics, or Natural Science with a primary concentration in Computer Science.

Antirequisite(s):

Credit for Computer Science 231 and any of Computer Science 215, 217, 235, Data Science 211, Computer Engineering 339, Engineering 233, or Digital Engineering 233 will not be allowed.

Note(s):

a. See the statements at the beginning of the Computer Science entry.

9. **Course Learning Outcomes**

- Read small procedural Python programs, identify any syntax any logic errors, identify type of data stored in specific variables and predict result of running code. This includes code that contains assignment, conditional and looping statements; arithmetic and boolean expressions; functions and recursive functions; input statements from the keyboard, mouse and files and output statements to the screen and files; creates new instances of classes and invokes methods on these instances and code that uses data structures such as lists and strings.
- Write and run small Python procedural programs that contains assignment, conditional and looping statements; arithmetic and boolean expressions; functions and recursive functions; input statements from the keyboard, mouse and files and output statements to the screen and files; creates new instances of classes and invokes methods on these instances and code that uses data structures such as lists and strings.
- Develop debugging skills to systematically identify and fix syntax and logic errors in procedural code written by self and others.
- Create basic classes in Python that contain a constructor, instance variables and methods.
- Design and implement a small application with a graphical user interface implemented using procedural Python code.

B. Assessment and Evaluation Information

1. **Assessment Components**

The University policy on grading and related matters is described in F.1and 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
Mini 1Aa	0.5%	May 09 2025		
Mini 1Ab	0.5%	May 16 2025		
Full A1	8%	May 23 2025		
Mini-A2a	0.5%	May 27 2025		
Midterm exam [1]	25%	May 29 2025 at 02:45 pm (60 Minutes)	in-person	
Mini-A2b	0.5%	May 30 2025		
Mini-A2c	0.5%	May 30 2025		
Full A2	8%	Jun 03 2025		
Mini A3a	0.5%	Jun 04 2025		
Mini-A3b	0.5%	Jun 06 2025		
Mini-A3c	0.5%	Jun 11 2025		
Full A3	10%	Jun 12 2025		
Mini-A4	0.5%	Jun 13 2025		
Mini-A5	0.5%	Jun 16 2025		
Full A4	7%	Jun 16 2025		
Registrar Scheduled Final Exam	37%	Final Exams Schedule	in person	Final Exams Schedule

[1] Note: this will be an in person examination.

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.

This course will have a Registrar Scheduled Final exam that will be delivered in-person and on campus.

The Final Examination Schedule will be published by the Registrar's Office approximately one month after the start of the term. The final

exam for this course will be designed to be completed within 2 hours.

2. **Assessment & Grading**

In order to be awarded a C- or higher for the term grade you need to have a passing weighted average score (i.e. a 'D') for the midterm and the final. This requirement overrides the scores of your other component grades.

Reappraisal of Graded Term Work and Final Grades:

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

3. **Examination Policy**

Closed book exam: **No electronic devices** (e.g., calculators, laptops, hand-held computers, tablets, pads) or other aids (e.g., textbooks, notes, slide rulers, abaci) will be allowed. Mobile phones must be shut off and out of sight. 'Simple' calculators are obviously excluded as well.

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

4. **Missed Components of Term Work**

If you miss the midterm examination, with the approval of the course instructor (and the receipt of the appropriate documentation), then the midterm grade will be transferred to the remaining components. Assignment extensions also require documentation and instructor approval.

If you are going to miss any graded term component, then you must let the course instructor know prior to the due date of assignment/exercise or the day/time of the examination.

In order to be awarded a grade of C- or higher the student must pass (D equivalent) the weighted average of the exam component (midterm and final).

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

1. **Equity Diversity & 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.

3. **Academic Integrity and 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 Code of Conduct 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 permission; borrowing experimental values from others 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
Policy and Procedure for Student Academic Misconduct
Faculty of Science Academic Misconduct Process
Research Integrity Policy

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

4. **Acceptable & Prohibited Tools and Resources**

The use of external code generators such as ChatGPT, Co-pilot are prohibited for graded components.

5. **Writing Across the 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 Writing Support , part of the Student Success Centre, can be utilized by all undergraduate and graduate students who feel they require further assistance. See also Section E.2 of the University Calendar.

6. **Academic 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: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Student-Accommodation-Policy.pdf

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: https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf.

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 Request for Accommodation in Academic Courses Form and sending by email to science@ucalgary.ca preferably 10 business days before the due date of an assessment or scheduled absence.

7. **Instructor Intellectual Property.**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy) and requirements of the copyright act (laws-lois.justice.gc.ca/eng/acts/C-42/index.html) 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.

8. **Recording of 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 Section E.6 Recording of Lectures of the University Calendar.

9. **Freedom of Information & 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.

10. **Human & Living Organism Studies Statements**

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 non-academic misconduct, 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: https://www.ucalgary.ca/registrar/registration/course-outlines

Electronically Approved - Apr 09 2025 15:58

Department Approval