1. **Course:** CPSC 231, Introduction to Computer Science for Computer Science Majors I - Fall 2021

   **Lecture 01:** TR 09:30 - 10:45 - Online

   **Instructor**  
   Dr. Jonathan Hudson  
   jwhudson@ucalgary.ca  
   **Phone**  
   403 220-2044  
   **Office**  
   ICT 712  
   **Hours**  
   TR 13:00-13:50

   **Lecture 02:** TR 15:30 - 16:45 - Online

   **Instructor**  
   Dr. Jonathan Hudson  
   jwhudson@ucalgary.ca  
   **Phone**  
   403 220-2044  
   **Office**  
   ICT 712  
   **Hours**  
   TR 13:00-13:50

   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

   *https://elearn.ucalgary.ca/technology-requirements-for-students/

   **For students in CPSC 231 the computer described above needs to be capable of installing and running Python 3 programs.**

   **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 has a registrar scheduled, synchronous final exam. The writing time is 2 hours + 50% buffer time.

   Lectures and tutorials will be synchronous at their scheduled times. The midterm and final will be synchronous through D2L.

   (Some activities such as tutorial exercises may be able to be completed asynchronously.)

   Synchronous lectures and tutorials will be recorded for later viewing but will not be developed for the purpose of being viewed asynchronously.

   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. Synchronous assessments are the midterm and final.

   **Course Site:**

   D2L: CPSC 231 L01-(Fall 2021)-Introduction to Computer Science for Computer Science Majors I  
   https://pages.cpsc.ucalgary.ca/~jwhudson/CPSC231F21/  

   D2L will be used for submitting assignments, viewing grades, exams, and class news. The Course Website will be embedded in D2L in the front page, but will host course slides, assignment instructions, example code, and general course content.

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

2. **Requisites:**

2021-08-31
See section 3.5.C in the Faculty of Science section of the online Calendar.

3. **Grading:**

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:

<table>
<thead>
<tr>
<th>Component(s)</th>
<th>Weighting</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercises</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Assignment 1</td>
<td>6</td>
<td>Friday, October 1st, 23:59 (11:59PM)</td>
</tr>
<tr>
<td>Assignment 2</td>
<td>7</td>
<td>Friday, October 22nd, 23:59 (11:59PM)</td>
</tr>
<tr>
<td>Assignment 3</td>
<td>7</td>
<td>Friday, November 19th, 23:59 (11:59PM)</td>
</tr>
<tr>
<td>Assignment 4</td>
<td>7</td>
<td>Friday, December 10th, 23:59 (11:59PM)</td>
</tr>
<tr>
<td>Midterm</td>
<td>30</td>
<td>Synchronous, Out-of-class (Friday, October 29, 2021 at 7:00 pm)</td>
</tr>
<tr>
<td>Final</td>
<td>40</td>
<td>Synchronous, Registrar Scheduled</td>
</tr>
</tbody>
</table>

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 final exam that will be scheduled by the Registrar. 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.

The final exam will be administered using an on-line platform. Per section G.5 of the online Academic Calendar, timed final exams administered using an on-line platform, such as D2L, will be available on the platform. Due to the scheduling of the final exams, the additional time will be added to the end of the registrar scheduled synchronous exam to support students. This way, your exam schedule accurately reflects the start time of the exam for any synchronous exams. E.g. If a synchronous exam is designed for 2 hours and the final exam is scheduled from 9-11am in your student centre, the additional time will be added to the end time of the synchronous exam. This means that if the exam has a 1 hour buffer time, a synchronous exam would start at 9 am and finish at 12pm.

All students will write the midterm and final exam at the same time (i.e. synchronous).

The midterm is designed to take 1 hour and 30 minutes to complete but students will be given 2 hours and 15 minutes to write (this extra time is due to +50% COVID requirement).

The final is designed to take 2 hours but students will be given 3 hours to write (this extra time is due to +50% COVID requirement).

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.

Students who achieve a higher grade on the final exam than on the midterm exam will have their midterm exam grade replaced with their final exam grade.

The University of Calgary offers a flexible grade option, Credit Granted (CG) to support student’s breadth of learning and student wellness. Faculty units may have additional requirements or restrictions for the use of the CG grade at the faculty, degree or program level. To see the full list of Faculty of Science courses where CG is not eligible, please visit the following website: https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade

4. **Missed Components Of Term Work:**

The university has suspended the requirement for students to provide evidence for absences. Please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations.

In the event that a student legitimately fails to submit any online assessment on time (e.g. due to illness etc...), please contact the course coordinator, or the course instructor if this course does not have a coordinator to arrange for a re-adjustment of a submission date. Absences not reported within 48 hours will not be accommodated. If an excused absence is approved, one possible arrangement is that the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course. This option is at the discretion of the coordinator and may not be a viable option based on the design of this course.
Scheduled Out-of-Class Activities:

The following out of class activities are scheduled for this course.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Location</th>
<th>Date and Time</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>Online</td>
<td>Friday, October 29, 2021 at 7:00 pm</td>
<td>135 Minutes</td>
</tr>
</tbody>
</table>

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a conflict with the out-of-class-time-activity, please contact your course coordinator/instructor no later than 14 days prior to the date of the out-of-class activity so that alternative arrangements may be made.

Exams are synchronous D2L quizzes.

Course Materials:

Recommended Textbook(s):


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

The workbook provides optional problems to be used to develop programming skills.

The ebook version of the textbook will likely be preferred by most students and contains some optional interactive assessments that students can use while reading and studying the material.

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.

Examination Policy:

The midterm and final exam will be synchronous timed assessments through D2L.

The midterm will be scheduled as an out-of-class activity and the final will be registrar scheduled.

The midterm and final exam are individual assessments with no discussion or collaboration allowed with classmates or others.

Students should also read the Calendar, Section G, on Examinations.

Approved Mandatory And Optional Course Supplemental Fees:

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

Writing Across The Curriculum Statement:

For all components of the course, in any written work, the quality of the student's writing (language, spelling, grammar, presentation etc.) can be a factor in the evaluation of the work. See also Section E.2 of the University Calendar.

Human Studies Statement:

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

See also Section E.5 of the University Calendar.

Reappraisal Of Grades:
A student wishing a reappraisal, should first attempt to review the graded work with the Course coordinator/instructor or department offering the course. Students with sufficient academic grounds may request a reappraisal. Non-academic grounds are not relevant for grade reappraisals. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See Section I.3 of the University Calendar.

a. **Term Work:** The student should present their rationale as effectively and as fully as possible to the Course coordinator/instructor within ten business days of either being notified about the mark, or of the item's return to the class. If the student is not satisfied with the outcome, the student shall submit the Reappraisal of Graded Term work form to the department in which the course is offered within 2 business days of receiving the decision from the instructor. The Department will arrange for a reappraisal of the work within the next ten business days. The reappraisal will only be considered if the student provides a detailed rationale that outlines where and for what reason an error is suspected. See sections I.1 and I.2 of the University Calendar.

b. **Final Exam:** The student shall submit the request to Enrolment Services. See Section I.3 of the University Calendar.

12. **Other Important Information For Students:**

a. **Mental Health** The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, Mental Health Services Website) and the Campus Mental Health Strategy website (Mental Health).

b. **SU Wellness Services:** For more information, see www.ucalgary.ca/wellnesscentre or call 403-210-9355.

c. **Sexual Violence:** The Sexual Violence Support Advocate, Carla Bertsch, can provide confidential support and information regarding sexual violence to all members of the university community. Carla can be reached by email (svsa@ucalgary.ca) or phone at 403-220-2208. The complete University of Calgary policy on sexual violence can be viewed at (https://www.ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Sexual-and-Gender-Based-Violence-Policy.pdf).

d. **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
- Student Academic Misconduct Policy and Procedure
- Research Integrity Policy

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

e. **Academic Accommodation Policy:**

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 Academic Accommodation Form, and sending it to Pavol Federl by email pfederl@ucalgary.ca preferably 10 business days before the due date of an assessment or scheduled absence.
f. **Freedom of Information and 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.

g. **Student Union Information:** VP Academic, Phone: 403-220-3911 Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: 403-220-3913 Email: sciencerep@su.ucalgary.ca. Student Ombudsman, Email: ombuds@ucalgary.ca.

h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction (USRI) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these surveys.

i. **Copyright of Course Materials:** 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.

Email correspondence with instructors or teaching assistants should not expect an immediate response. In most cases you should expect a response to your email inquiries about the course within 24 hours except on weekends and holidays.

**Course 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.