UNIVERSITY OF CALGARY
FACULTY OF SCIENCE

COURSE OUTLINE

1. **Course:** CPSC 219, Introduction to Computer Science for Multidisciplinary Studies II - Winter 2023

   Lecture 01 : WF 16:00 - 17:50 - Online

Instructor	Email	Phone	Office	Hours
Dr Lorans Alabood	lorans.alabood@ucalgary.ca NA		ICT 648	Per request

   Lecture 02 : WF 16:00 - 17:50 - Online

Instructor	Email	Phone	Office	Hours
Dr Lorans Alabood	lorans.alabood@ucalgary.ca NA		ICT 648	Per request

   To account for any necessary transition to remote learning for the current semester, courses with in-person lectures, labs, or tutorials may be shifted to remote delivery for a certain period of time. In addition, adjustments may be made to the modality and format of assessments and deadlines, as well as to other course components and/or requirements, so that all coursework tasks are in line with the necessary and evolving health precautions for all involved (students and staff).

   Online Delivery Details:

   Some aspects of this course are being offered in real-time via scheduled meeting times. For those aspects 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.

   - All lecture materials are recorded and available on D2L with supporting materials.
   - Students are required to complete a set of quizzes on a weekly basis.
   - For the coding component of this course, students can choose to either complete a series of weekly coding challenges, or propose and implement a group project that meets specific criteria. TA approval of the project proposal is required prior to implementation.
   - If you choose to complete a group project, you must work in groups of three members.
   - Students are required to go through all lecture material prior to the start of class. Once you have completed this, you are ready to tackle the coding challenge (if you chose this path) and quiz for the topic.
   - The Zoom lectures allow you to join a breakout room to get debugging support for the coding challenge, group project, and to discuss the quiz.
   - It is required that you get a 'Pass' grade in a coding challenge before you can start on the subsequent set of materials.
   - You can re-submit coding challenges and re-take a quiz a maximum of two times for each.
   - The Zoom lecture discussions will ensure that you will be successful in the second quiz attempt.

   Course Site:

   D2L: CPSC 219 L01-(Winter 2023)-Introduction to Computer Science for Multidisciplinary Studies II

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

   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. **Requisites:**

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

Prerequisite(s):
Computer Science 217 or Data Science 211.

Antirequisite(s):
Credit for Computer Science 219 and any of 233, 235, Electrical Engineering 497 or Computer Engineering 493 will not be allowed.

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:

Course Component	Weight	Due Date (duration for exams)	Modality for exams	Location for exams
Mandatory Quizzes	40%	Ongoing		
Coding component option one: coding challenges	60%	Ongoing		
Coding component option two: group project	60%	Ongoing		

Each piece of work (reports, assignments, quizzes, midterm exam(s) or final examination) submitted by the student will be assigned a grade. The student's grade for each component listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade.

The conversion between a percentage grade and letter grade is as follows.

	A+	A	A-	B+	B	B-	C+	C	C-	D+	D
Minimum % Required	99 %	94 %	90 %	85%	80%	75 %	70 %	65%	60%	55 %	50 %

*All students are required to complete a set of mandatory quizzes. There are a total of 22 quizzes. Students must complete the first 15 quizzes or they will get a 0 grade for the total grade on all quizzes. Out of the remaining 7 quizzes, students can choose to drop 2 with the lowest grade. Only 20 out of the 22 quizzes will count towards the overall grade.

**All students are required to choose one of the two coding component options; either a series of coding challenges or a group project. Students must choose one path prior to the first group project deadline (23rd of Jan 2023).

*** The same quizzes policy is appliable to the coding challenges (first 15 coding challenges are mandatory, 5 out of the remaining 7 are needed for a full mark).

 **** For students who choose the group project path, all groups must consist of three members who would collaborate to complete a project of 5 stages delivered over 5 deadlines.

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.

- All coding challenges and quizzes are due the same day of the lecture. However, all deadlines have been extended by three weeks which is the maximum late submission period where a student can still recover and get back on track. No submissions will be accepted past this grace period.

- Passing all tests for a coding challenge is required before moving to the next one. Students can submit coding challenges and quizzes twice only. Students should not submit a coding challenge unless if it passes all tests as the grading for each coding challenge is on Pass/Fail basses. For the quizzes, student can take the same quiz twice, the lower mark will get dropped.

5. **Scheduled Out-of-Class Activities:**

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

6. **Course Materials:**

   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. **Examination Policy:**

   No aids are allowed on tests or examinations.

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

8. **Approved Mandatory And Optional Course Supplemental Fees:**

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

9. **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.

10. **Human Studies Statement:**

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

    See also Section E.5 of the University Calendar.

11. **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 t o 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 their [website](#) 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 [here.](#)

d. **[Student Ombuds Office:](#)** A safe place for all students of the University of Calgary to discuss student related issues, interpersonal conflict, academic and non-academic concerns, and many other problems.

e. **Student Union Information:** [SU contact](#), Email your SU Science Reps: [science1@su.ucalgary.ca](#), [science2@su.ucalgary.ca](#), [science3@su.ucalgary.ca](#),

f. **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 by email preferably 10 business days before the due date of an assessment or scheduled absence.

g. **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](#)
[Faculty of Science Academic Misconduct Process](#)
[Research Integrity Policy](#)

Additional information is available on the [Student Success Centre Academic Integrity page](#)

h. **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.

i. **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.

j. **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.

Course Outcomes:

- Describe the difference between procedural and object-oriented approaches to program decomposition.
- Apply the principles of object-oriented programming to design and document, using a standard modelling language, solutions to small-scale computational problems.
- Read, trace the execution, and determine the outcome of small software systems developed using: object-oriented constructs including classes, objects, encapsulation, inheritance, and interfaces; and recursive functions.
- Create and debug small software systems that make effective use of constructs including classes, objects, encapsulation, inheritance, and interfaces; and recursive functions.
- Develop a client that makes use of external object-oriented libraries or application programming interfaces.
- Become familiar with a version control system and integrated development environment.

Electronically Approved - Jan 16 2023 18:50

Department Approval