

COURSE OUTLINE

1. Course: DATA 221, Introduction to Data Science - Winter 2024

Lecture 01: MWF 09:00 - 09:50 in SB 105

Instructor Email Phone Office Hours

Dr. Leanne Wu lewu@ucalgary.ca n/a ICT 713 TBA (Details to be available in D2L)

When you need information

Here is who to ask about what:

Topic	Who	Venue (the BEST way to find answers)	
Lecture content (and how it relates to assessments) Assessments (deadlines, requirements, grading)	Instructor or TA	Course communication platforms, student hours, lecture/tutorial	
Course administration (Accommodations, Extensions, Project Team formation, management or other issues)	Instructor	Student hours, email (University of Calgary email account only)	
Tutorial content	TA	Tutorial, course communication platforms, email	
Assignment Assessment	TA	Tutorial, email (University of Calgary email account only)	

All communications with the teaching team (except in-person) are not guaranteed to be synchronous - the goal is to respond within 24 hours. You may experience a longer turnaround for evenings, scheduled breaks and holidays and weekends. You are not obligated to reply on your own time.

Assignment submission will consist of the submission of final files in D2L Dropbox. Other requirements for assignment submission will be shared via D2L.

All course assessments will require a meaningful amount of programming in Python.

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).

In Person Delivery Details:

Lecture and tutorial material will be delivered in-person.

It is possible that a portion of lecture will be recorded, but not guaranteed.

Tutorials will time set aside for coding exercises, to be completed for assessment.

Course Site:

D2L: DATA 221 (Winter 2024) - Introduction to Data Science

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 231.

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
Coding Exercises ¹	24%	Ongoing		
Project ²	50%	Ongoing		
Assignment 1 ³	5%	Feb 02 2024		
Assignment 2 ⁴	7%	Mar 01 2024		
Assignment 3 ⁵	7%	Mar 29 2024		
Assignment 4 ⁶	7%	Apr 04 2024		

All coding exercises will be conducted in-tutorial, on a weekly basis, beginning the week of January 29. A practice coding exercise will be provided in tutorial for the week of January 22. Eight coding exercises are scheduled to occur, but the lowest two grades will be dropped.

Each of the above components will be given a letter grade using the official university grading system (see <u>section F.1.1</u>). 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.

All assessments will be converted from points to a letter grade (conversion scales will be made available on D2L). No percentages will be used.

Extensions

Students may choose to submit one or more assignments late, for no more than a total of five (5) days over the entire semester.

Each 24 hour period late after an assignment deadline counts as one full day regardless of how many hours the assignment was late within that period. For example, deadlines are generally on a Friday, 11:59pm local time. That means an assignment submitted any time Saturday before 11:59pm local time will be considered as 1 day late and count against the total number of late days.

As long as a student still has days left to use, their assignment will be graded without penalty. If a student has no more days left or their submission exceeds the days they have remaining, then they will receive a 0 grade for a late assignment.

TAs will indicate the students late day usage in grading feedback.

In the event of significant life events, a student may contact the instructor no later than five business days in advance to make alternate arrangements (a planned extension). The student must provide a reason, a new proposed deadline, and a plan for how they will maintain currency with course content. These are only provided at the instructor's discretion.

The University of Calgary offers a <u>flexible grade option</u>, 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:

In the event that a student legitimately fails to submit any online or in-person assessment on time (e.g. due to illness, domestic affliction, 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, or possible exemption and reweighing of components. Absences not reported within 48 hours will not be accommodated. Students may be asked to provide supporting documentation (Section M.1) for an excused absence, See FAQ.

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² 10% - Project proposal and team contract 10% - Milestone 1 (Prototype) 10% - Milestone 2 (Presentation) 15% - Final Submission (via D2L Dropbox) 5% - Reflection (in D2L dropbox)

³ Submission information to be provided in D2L

⁴ Submission information to be provided in D2L

⁵ Submission information to be provided in D2L

⁶ Submission information to be provided in D2L

If an excused absence is approved, options for how the missed assessment is dealt with is at the discretion of the coordinator or course instructor. Some options such as an exemption and pro-rating among the components of the course may not be a viable option based on the design of this course.

5. Scheduled Out-of-Class Activities:

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

6. Course Materials:

Lecture slides and other support material will be posted in D2L.

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:

All assignments are to be completed individually. The instructor will use an automated code similarity detection system.

All instances where breaches of academic integrity are suspected or alleged will be investigated and reported to the Faculty of Science.

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 <u>Section E.5</u> 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 1.3 of the University Calendar.

- a. **Term Work:** The student should present their rationale a s 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 1.1 and 1.2 of the University Calendar
- b. Final Exam: The student shall submit the request to Enrolment Services. See Section 1.3 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

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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. <u>Student Ombuds Office</u>: 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:** <u>SU contact</u>, Email your SU Science Reps: <u>science1@su.ucalgary.ca</u>, <u>science2@su.ucalgary.ca</u>, <u>science3@su.ucalgary.ca</u>,

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 <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 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 (<u>USRI</u>) 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.

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Department Approval

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