

## COURSE OUTLINE

1. Course: SCIE 331, Scientific Explorations - Winter 2024

#### Course Outcomes:

- · Identify questions that can be addressed using the process of science
- · Discuss ideas about the natural world using appropriate scientific vocabulary, supported with properly referenced sources
- · Make meaning of hands-on activities that illustrate key ideas in science
- · Evaluate the validity of scientific information by critically analyzing the information source
- Reflect on common misconceptions in science, as well as key historical contributions to science, to make sense of how science progresses and its strengths and limitations

Lecture 01 : TR 14:00 - 15:15 in TI FORUM

Instructor	Email	Phone	Office	Hours
Dr. Laura Mazzino	laura.mazzino@ucalgary.ca 403 220-8648		SB 533	Mon 2PM - 3PM, Wed 9:30AM - 10:30AM

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:

This course is being offered in-person: you are required to be present in the classroom for the TOTALITY of the lecture time scheduled.

Students will be meeting with the professor and will be working with other students in the class discussions and group work. Inclass group work is mandatory and an essential part of the course and the student's grade.

By registering to the course you agree to the Communication Guidelines posted in D2L, see section 3.

# Course Site:

D2L: SCIE 331 L01-(Winter 2024)-Scientific Explorations

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.

#### 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			
Group Discussions and Summaries (weekly) <sup>1</sup>	10%	Ongoing					
Online Assignments – Weekly (12 items, 2 lowest dropped) <sup>2</sup>	10%	Ongoing					
Midterm 1 <sup>3</sup>	15%	Feb 27 2024 at 02:00 pm (75 Minutes)	in-person	In class			
Individual Term Project - Infographics <sup>4</sup>	20%	Mar 12 2024					
Midterm 2 <sup>5</sup>	15%	Mar 19 2024 at 02:00 pm (75 Minutes)	in-person	In class			
Registrar Scheduled Final Exam <sup>6</sup>	30%	Will be available when the final exam schedule is released by the Registrar	in person	Will be available when the final exam schedule is released by the Registrar			

<sup>1</sup>\*\*\*80% attendance for 100% of mark\*\*\*. By enrolling in the course, students commit to attend the lectures and work in the inclass group discussions and summaries (worksheets), NO EXCEPTIONS. Each lecture, attendance will be taken. Please do not contact the instructor each time you are absent. At the end of the semester, the mark will be adjusted proportionally: final mark obtained in this component will be multiplied by 1.25 up to a total of 100% possible (marks over 100% will be rounded to 100%) <sup>2</sup>\*\*\*The 2 lowest will be dropped\*\*\*. Online assignments have the format "unlimited attempts" and they are great practice for exams. The availability and due dates will be posted in the D2L Calendar and in the COURSE INFORMATION section in D2L before the semester starts.

<sup>3</sup> See "EXAM POLICY", section 7

<sup>4</sup> Partial submissions will be requested during the semester. Milestones and guidelines will be posted in D2L before the semester starts, under the Course Information section. Students have unlimited attempts to submit up to the final deadline and are responsible for the partial submissions and final submissions. LATE SUBMISSIONS will be heavily penalized, see guidelines, NO EXCEPTIONS.

<sup>5</sup> See "EXAM POLICY", section 7

<sup>6</sup> See "EXAM POLICY", section 7

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+	Α	A-	B+	В	B-	C+	С	C-	D+	D
Minimum % Required	95 %	90 %	85 %	80%	75%	70 %	65 %	60%	55%	50 %	45 %

This course will have a Registrar Scheduled Final exam that will be delivered in-person and on campus. <u>The Final Examination</u> <u>Schedule</u> 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.

**Communication guidelines**: Students are required to read and agree to the Communication Guidelines for this course described below.

Students will conduct respectful behavior toward their other classmates, the Teaching Assistants, and to the instructor, during classes and during office hours in all communications, written and oral. Disrespectful behavior will not be tolerated and reported as a non-academic misconduct.

- Students MUST visit office hours with the instructor to discuss any personal matter. For all other matters, questions must be directed to the instructor during lectures, in particular during the in-class group work. NO EMAILS.
- Allowed EMAILS: Hospitalization, sickness extending more than 2 weeks, passing in the family, sicknesses of contagious matter (covid19) that affect course work BEYOND the accommodations already provided. In these cases, the students can email the instructor (I work 9am- 5pm, please allow 3-4 work days for responses). See Sections 4 and 11.
- Students must include the course code SCIE331 in the subject line.
- Students must include in the first line 1) their first and last name and 2) their UCID number.
- Students must follow the format provided in the Communications Guidelines in D2L.

- Students must use their UCalgary email official accounts. Correspondence from private accounts, other than the UofC official accounts, or without the required information will NOT be answered.

- When communicating with the instructor on important matters, please allow 3-4 work days for a response to e-mail inquiries.

- Technical solutions to homework questions will not be provided by email. Students are expected to ask these types of questions in person (lectures, office hours).

A TopHat class discussion will be open for the term (see login information in the D2L Course Information section) to facilitate
peer-interaction and to receive peer-feedback. The class discussion will be monitored by the instructor to address during the

lecture any relevant matters or inquiries.

 Office hours by TAs or Instructors are a great opportunity to get one-on-one help with the course in general and particular questions regarding a topic, a concept, an assignment, course management, etc. TAs will also have office hours to help you with anything you need.

**Assignments:** The assignments will be completed through D2L. For more information, consult D2L, under the section "Course Information Assignments": A list of assignments with their release date/time and due date/time will be posted in that section.

- The 2 lowest assignments will be automatically dropped AFTER the FINAL EXAM.
- NO LATE SUBMISSIONS ARE ACCEPTED.
- Students will complete an initial "Assignment 0" before the second class. This assignment is an initial assignment to test the comprehension of this course outline and is set up for unlimited attempts and carries a total grade of 0% on the final grade. The completion of Assignment 0 with 100% is a requirement to 'unlock' the rest of the material for the course on D2L. If a student forgets to answer this assignment or did not score 100% yet, their D2L shell will show empty. After achieving 100% in this initial assignment, all available content for the course (and subsequent content uploaded throughout the course) will appear automatically. Assignment 0 will become available by January 8, 2024 in the D2L "quizzes" section.

**Midterms exams**: See "Exam Policy" section. Further details about midterms will be given in the lecture 1 week prior to each midterm exam.

Final Exam: See "Exam Policy" section. Further details about the final exam will be given in the lecture 1 week prior to the last day of class.

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: <u>https://science.ucalgary.ca/current-students/undergraduate/program-advising/flexible-grading-option-cg-grade</u>

# 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.

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:

We will use scheduled class time: we will use many Tuesday and Thursday times for in-person classes. Group discussions and completion of worksheets are an essential part of the learning process in this course. 80% of attendance is required for 100% of the marks for in-class work. Partial attendance (arriving late to lectures) are counted as full absentee.

We won't use a textbook: I curate content from the web and build my own resources, so our required handouts, videos, and readings for this course are available through postings on D2L, in the section THINKING ASSIGNMENTS (reading assignments, video assignments, exploration assignments).

We will work through Modules: Each module has a theme that will help you engaged in the historic, contemporary and modern Scientific Explorations.

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 <u>ELearning</u> online website.

### 7. Examination Policy:

All exams are closed-book exams.

Midterm exams will be in class exams and final exam will be a registrar exam.

- A CALCULATOR (of any kind including graphing or programmable NON-communicating calculators) is required to complete these assessments in class.
- Students are allowed to use in the exams **ONE (1) personalized letter size page (8.5 x 11 in; 22 cm x 28 cm) front and back** with formulas, graphs, diagrams and personal notes (handwritten or typed).

All information regarding the exams will be presented a week prior to the exams during the lecture. Please avoid asking for information regarding exams. Save all your questions for the info session during the lecture.

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  $\underline{E.2}$  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. <u>Non-academic grounds are not relevant for grade reappraisals</u>. Students should be aware that the grade being reappraised may be raised, lowered or remain the same. See <u>Section I.3</u> 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 <u>form</u> 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 <u>I.1</u> and <u>I.2</u> 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 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, <u>Mental Health Services Website</u>) and the Campus Mental Health Strategy website (<u>Mental Health</u>).
- 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: <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 Academic Accommodation Form</u> and sending it to Dr. Nicole Sandblom by email <u>ntscdirector@ucalgary.ca</u> 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 <u>non-academic misconduct</u>, 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 <u>Legal Services</u> 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.

Electronically Approved - Dec 18 2023 15:12

**Department Approval**