



COURSE OUTLINE

1. **Course:** MATH 275, Calculus for Engineers and Scientists - Fall 2021

Lecture 01: MWF 11:00 - 11:50 in ICT 217

Instructor	Email	Phone	Office	Hours
Dr Mark Bauer	bauerm@ucalgary.ca	403 210-8456	MS 558	W 11:00-11:50, R 11:30-12:30, and by appointment

Lecture 02: MWF 11:00 - 11:50 in ICT 114

Instructor	Email	Phone	Office	Hours
Dr Mark Bauer	bauerm@ucalgary.ca	403 210-8456	MS 558	W 11:00-11:50, R 11:30-12:30, and by appointment

Lecture 03: MWF 08:00 - 08:50 in ENG 03

Instructor	Email	Phone	Office	Hours
Yousry Elsabrouty	yelsabro@ucalgary.ca	403 220-2255	MS 418	TBA

Lecture 04: MWF 08:00 - 08:50 in ENG 224

Instructor	Email	Phone	Office	Hours
Yousry Elsabrouty	yelsabro@ucalgary.ca	403 220-2255	MS 418	TBA

Lecture 05: MWF 11:00 - 11:50 in ENE 123 and 11:00 - 11:50 in ENE 127

Instructor	Email	Phone	Office	Hours
Dr Ryan Hamilton	rhamilt@ucalgary.ca	403 220-3950	MS 574	TBA

Lecture 06: MWF 13:00 - 13:50 in ICT 217

Instructor	Email	Phone	Office	Hours

Lecture 07: MWF 13:00 - 13:50 in ICT 114

Instructor	Email	Phone	Office	Hours
Yousry Elsabrouty	yelsabro@ucalgary.ca	403 220-2255	MS 418	TBA

Lecture 08: MWF 16:00 - 16:50 in ENG 03

Instructor	Email	Phone	Office	Hours
Dr Ryan Hamilton	rhamilt@ucalgary.ca	403 220-3950	MS 574	TBA

Lecture 09: MWF 16:00 - 16:50 in ENG 224

Instructor	Email	Phone	Office	Hours
Dr Ryan Hamilton	rhamilt@ucalgary.ca	403 220-3950	MS 574	TBA

Lecture 10: MWF 13:00 - 13:50 in ENE 123 and 13:00 - 13:50 in ENE 127

Instructor	Email	Phone	Office	Hours
Dr Ryan Hamilton	rhamilt@ucalgary.ca	403 220-3950	MS 574	TBA

Lecture 11: MWF 13:00 - 13:50 - Online

Instructor	Email	Phone	Office	Hours

Coordinator(s)

Name	Email	Phone	Office	Hours
Yousry Elsabrouty	yelsabro@ucalgary.ca	403 220-2255	MS 418	TBA

In Person Delivery Details:

1. Active Learning (in Groups) will take place every Wednesday & Friday
2. On Monday's classes :
 - (i) material of weekly recorded lectures will be discussed

(ii) diagnose students difficulty (If any) followed by a brief presentation

(iii) Respond to all questions that may arise from the discussion.

Re-Entry Protocol for Labs and Classrooms:

To limit the spread of COVID-19 on campus, the University of Calgary has implemented safety measures to ensure the campus is a safe and welcoming space for students, faculty and staff. The most current safety information for campus can be found [here](#).

Course Site:

D2L: MATH 275 L01-(Fall 2021)-Calculus for Engineers and Scientists

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

2. Requisites:

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Prerequisite(s):

Mathematics 30-1 or Mathematics 2 (offered by Continuing Education); and Mathematics 31 or Mathematics 3 (offered by Continuing Education).

Antirequisite(s):

Credit for Mathematics 275 and either 249 or 265 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:

Component(s)	Weighting %	Date
Online Quizzes (10)	10 %	Weekly on Tuesdays , starting week # 2
(4) Online Assignments	30 %	Dates / Due Dates will be posted in advance
- Online Midterm Test (1)	20%	Tuesday , November 02 / 2021
Online Final Examination	40%	To be scheduled by registrar's office (Dec. 13 - 22)

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.

A Passing Grade in the Final Examinations is Required to Obtain a Grade of " D " or Better in the Course.

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.

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

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

6. **Course Materials:**

Required Textbook(s):

Robert A. Adams & Christopher Essex, *Calculus, A Complete Course*: Pearson Canada Inc.

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:

1. Quizzes , Midterm Test and Final Examination will be held online in D2L.
Simply click on **Assessments** and choose Quizzes from the drop down menu
2. Quizzes , Midterm Test and Final Examination are all **Open Book**.
However, you are not allowed to work with some one, or copy from online resources (which can be easily detected).
3. You will have to agree to a statement posted on every online testing component indicating that :
 - (i) you neither give nor receive aid from any other person
 - (ii) the work completed is entirely your own

Aids:

Here is a list of Aides allowed in Quizzes , Midterm and Final Examination:

- (i) All Material posted on D2L including the E Text , Study Plan and Assignments.
- (ii) Your own Notes made from Lectures , Labs or Tutorials.
- (iii) Other material recommended by your professors such as formula sheet , etc.
- (iii) A scientific non-programmable Calculator.

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 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

- 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](tel: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 (svasa@ucalgary.ca) or phone at [403-220-2208](tel: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 Mark Bauer by email bauerm@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 (FOIP). 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](tel:403-220-3911) Email: suvpaca@ucalgary.ca. SU Faculty Rep., Phone: [403-220-3913](tel: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.

Course Outcomes:

- Adapt to the language and notion of calculus.
- Develop an understanding of the key concepts of calculus and use it to compute Limits, Derivatives, and Integrals of appropriate real valued functions of a single real variable
- Perform calculus techniques to solve a wide variety of practical problems
- Analyze appropriate real-world problems in interdisciplinary fields.
- Explore the relationship between key calculus concepts and its geometric representation for an enhanced interpretation of certain physical or natural Property.
- Recognize that not only the technology can be used to achieve some desired results; but also it has limitations.

Electronically Approved - Sep 08 2021 10:42

Department Approval

Electronically Approved - Sep 08 2021 19:41

Associate Dean's Approval