

# **COURSE OUTLINE**

1. **Course:** MATH 275, Calculus for Engineers and Scientists - Fall 2020

Lecture 01:				
Instructor	Email	Phone	Office	Hours
Lecture 02:				
Instructor	Email	Phone	Office	Hours
Dr Yuriy Zinchenko	yzinchen@ucalgary.ca 220-4044		MS 524	TBA
Lecture 03:				
Instructor	Email	Phone	Office	Hours
Dr Ryan Hamilton	rhamilt@ucalg	jary.ca 403 220-3950	MS 574	ТВА
Lecture 04:				
Instructor	Email	Phone	Office	Hours
Yousry Elsabrouty	yelsabro@ucalgary.ca 403 220-2255		MS 418	TBA
Coordinator(s)				
Name	Email	Phone	Office	Hours
Yousry Elsabrouty	yelsabro@uca	lgary.ca 403 220-2255	MS 418	TBA

### **Online Delivery Details:**

This course does not follow a scheduled meeting pattern.

- 1. Lectures will be recorded in advance and posted on D2L
- 2. Detailed Notes will be also posted on D2L
- 3. A Weekly Question Period will be arranged on D2L.
- 4. Midterm Test and Final Examination will be administered on D2L.
- 5. Assignments will be posted and completed online using My Math Lab.

### **Course Site:**

D2L: MATH 275 L01-(Fall 2020)-Calculus for Engineers and Scientists

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

IMPORTANT: It is the student's responsibility to ensure that they have adequate computer and internet access to write the exams. Students will be required to begin their exams promptly at the start of their scheduled class on the day of the exam. If a student encounters any technical issues starting an exam, they MUST document the issue by taking a photo, screenshot, or video, and they must contact the instructor immediately so that either additional time can be provided to access the exam or alternative arrangements made. Students claiming to experience such difficulties who do not contact their instructor providing evidence of technical difficulties within 15 minutes of the scheduled start of the exam will not be allowed to write the exam and will receive a grade of zero (0) on the exam. If a student's exam is suspended during the exam (lost internet connection, internet browser crashes etc.), they MUST provide evidence (photo/ screenshot/video) and contact the instructor immediately. Students will then be granted reentry to suspended exams if they began the exam on time, provided evidence of the suspension, and still have time remaining to complete their exam.

### 2. Requisites:

See section <u>3.5.C</u> 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 <u>F.1</u> and <u>F.2</u> of the online University Calendar.

In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %	Date
Online Assignments (4)	30	
Midterm Test (1)	30	Thursday October 29 , 6:00 - 7:30 PM - synchronous and online
Final Exam	40	To be Scheduled by Registrar's office - synchronous and online - designed to be completed in 2hrs but students will be given 3 hrs to write.

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.

This course has a registrar scheduled final exam.

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

# 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, then the percentage weight of the legitimately missed assignment could also be pro-rated among the components of the course.

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

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

Activity	Location	Date and Time	Duration
Midterm	Web-Based	Thursday, October 29, 2020 at 6:00 pm	1.5 Hours

# 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.

The midterm is designed to take 90 minutes to complete but students will be given an additional 45 minutes to complete it to factor in technical and other issues.

### 6. Course Materials:

Required Textbook(s):

Robert A. Adams and Christopher Essex , Ninth Edition, *E Text : Calculus , A Complete Course with My MathLab*: Pearson Education 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 <u>ELearning</u> online website.

### 7. Examination Policy:

Quizzes , Midterm Test and Final Exam will be Held online in D2L

Click on Assessments and choose Quizzes from the Drop-Down Menu.

Quizzes , Midterm and Final are Open Book, but you are not allowed to work with some one

Or copy from online.

You will have to agree to the statement before you can open Quiz.

If you do not agree , you must let me know so I can notify administration.

Full details about Dates , Duration for Assignments / Midterm Test will be announced well in advance

### Aids:

Specified Aids such a Formula Sheet , Own Notes etc are allowed on tests or examinations.

However Students are not allowed to access online Material

A statement will be included in D2L and must be agreed upon before opening Quiz and / or an exam.

Students should also read the Calendar, <u>Section G</u>, 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 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 <u>1.1</u> and <u>1.2</u> of the University Calendar
- b. **Final Exam:**The student shall submit the request to Enrolment Services. See <u>Section 1.3</u> 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 Center: For more information, see <u>www.ucalgary.ca/wellnesscentre</u> or call <u>403-210-9355</u>.

- 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 (<u>svsa@ucalgary.ca</u>) or phone at <u>403-220-2208</u>. The complete University of Calgary policy on sexual violence can be viewed at (<u>https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf</u>)
- d. Misconduct: Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under Section K. Student Misconduct to inform yourself of definitions, processes and penalties. Examples of academic misconduct may include: submitting or presenting work as if it were the student's own work when it is not; submitting or presenting work in one course which has also been submitted in another course without the instructor's permission; collaborating in whole or in part without prior agreement of the instructor; borrowing experimental values from others without the instructor's approval; falsification/ fabrication of experimental values in a report. These are only examples.
- e. **Academic Accommodation Policy:** Students needing an accommodation because of a disability or medical condition should contact Student Accessibility Services in accordance with the procedure for accommodations for students with disabilities available at <u>procedure-for-accommodations-for-students-with-disabilities.pdf</u>.

Students needing an accommodation in relation to their coursework or to fulfill requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Associate Head of the Department of Mathematics & Statistics, Mark Bauer by email bauerm@ucalgary.ca or phone 403-220-4189. Religious accommodation requests relating to class, test or exam scheduling or absences must be submitted no later than **14 days** prior to the date in question. See <u>Section E.4</u> of the University Calendar.

- 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 <u>Legal Services</u> website.
- g. **Student Union Information:** <u>VP Academic</u>, Phone: <u>403-220-3911</u> Email: <u>suvpaca@ucalgary.ca</u>. SU Faculty Rep., Phone: <u>403-220-3913</u> Email: <u>sciencerep@su.ucalgary.ca</u>. <u>Student Ombudsman</u>, Email: <u>ombuds@ucalgary.ca</u>.
- h. **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.
- 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.

# **Department Approval**

Electronically Approved - Sep 08 2020 09:12

Associate Dean's Approval