



**REVISED COURSE OUTLINE FOR REMOTE LEARNING**

To account for the necessary transition to remote learning from March 13 onward, adjustments have been made to assessment deadlines and requirements so that all coursework tasks are in line with the necessary and evolving health precautions for all involved (students and staff). If you are unable to meet the deadlines or requirements specified, please connect with your course instructor to work out alternative dates/assessments.

1. **Course:** MATH 367, University Calculus III - Winter 2020

Lecture 01: MWF 14:00 - 14:50 - Remote Learning (check with your instructor or coordinator for details)

| Instructor        | Email                | Phone        | Office | Hours                                |
|-------------------|----------------------|--------------|--------|--------------------------------------|
| Dr Berndt Brenken | bbrenken@ucalgary.ca | 403 220-3948 | MS 440 | F 15 -16; changes and updates on D2L |

**Course Site:**

D2L: MATH 367 L01-(Winter 2020)-University Calculus III

**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 267 or 277; Mathematics 211 or 213.

**Antirequisite(s):**

Credit for Mathematics 367 and either 331 or 377 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 % |
|--|-------------|
| Webwork assignments (the best 6 of the first assigned and completed 7)                           | 18          |
| Midterm Test   | 40          |
| Webwork assignments (3 new)  | 12          |
| Final exam (webwork, 4 hr limit once started, available April 26 at 9 am to April 27 at 6:30 pm) | 30          |

Notes: a student may opt to keep the original weightings, or the new weightings listed above, but the original 30 % weighting on the midterm and a 40% for the final

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.

A passing mark on the final exam is required in order to earn a minimum grade of C- in this course.

Each piece of work (assignments, midterm test or final examination) submitted by the student will be assigned a percentage score. The student's average percentage score for the various components 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 (bearing in mind that a maximum grade of D will result if the student does not pass the final exam). The conversion between course percentage and letter grade is given below, the ranges may be adjusted lower but not higher:

| Letter Grade Conversions |                  |
|--------------------------|------------------|
| Letter Grade             | % Range          |
| A+                       | $x \geq 96$      |
| A                        | $90 \leq x < 96$ |
| A-                       | $84 \leq x < 90$ |
| B+                       | $80 \leq x < 84$ |
| B                        | $75 \leq x < 80$ |
| B-                       | $72 \leq x < 75$ |
| C+                       | $68 \leq x < 72$ |
| C                        | $64 \leq x < 68$ |
| C-                       | $60 \leq x < 64$ |
| D+                       | $57 \leq x < 60$ |
| D                        | $50 \leq x < 57$ |
| F                        | $x < 50$         |

4. **Missed Components Of Term Work:**

The University has suspended requirements for students to provide evidence for reasons for absences so please do not attend medical clinics for medical notes or Commissioners for Oaths for statutory declarations. Please let your instructor know immediately if you are ill and cannot meet the deadlines specified.

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

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

| Activity         | Location       | Date and Time                       | Duration  |
|------------------|----------------|-------------------------------------|-----------|
| MATH 367 Midterm | ST 143, ST 145 | Thursday, March 12, 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.

6. **Course Materials:**

Recommended Textbook(s):

R Adams, C Essex, *Calculus, A complete course*: Pearson.  
R Adams, C Essex, *Calculus Several Variables*: Pearson.

**Any** edition of these recommended texts will do. Other online open source resources are also available, and are listed on the course D2L site.

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 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 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 Center:** The Students Union Wellness Centre provides health and wellness support for students including information and counselling on physical health, mental health and nutrition. For more information, see [www.ucalgary.ca/wellnesscentre](http://www.ucalgary.ca/wellnesscentre) or call [403-210-9355](tel:403-210-9355).
- c. **Sexual Violence:** The University of Calgary is committed to fostering a safe, productive learning environment. The Sexual Violence Policy (<https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>) is a fundamental element in creating and sustaining a safer campus environment for all community members. We understand that sexual violence can undermine students' academic success and we encourage students who have experienced some form of sexual misconduct to talk to someone about their experience, so they can get the support they need. 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](mailto:svsa@ucalgary.ca)) or phone at [403-220-2208](tel:403-220-2208).
- 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. **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- f. **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 [procedure-for-accommodations-for-students-with-disabilities.pdf](#).

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 [Section E.4](#) of the University Calendar.

- g. **Safewalk:** Campus Security will escort individuals day or night (See the [Campus Safewalk](#) website). Call [403-220-5333](#) for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- h. **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.
- i. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](#) Email: [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca). SU Faculty Rep., Phone: [403-220-3913](#) Email: [sciencerep@su.ucalgary.ca](mailto:sciencerep@su.ucalgary.ca). [Student Ombudsman](#), Email: [ombuds@ucalgary.ca](mailto:ombuds@ucalgary.ca).
- j. **Internet and Electronic Device Information:** Unless instructed otherwise, cell phones should be turned off during class. All communication with other individuals via laptop, tablet, smart phone or other device is prohibited during class unless specifically permitted by the instructor. Students that violate this policy may be asked to leave the classroom. Repeated violations may result in a charge of misconduct.
- k. **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.
- l. **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.

Further information regarding webwork and tutorials is available on the course D2L site.

#### Course Outcomes:

- Work with both geometric and algebraic aspects of vector geometry and apply it in extending the analytic exploration of functions. This includes interpreting the gradient vector field of (scalar) functions and finding and using tangent and normal vector fields for curves and surfaces determined in diverse ways.
- Describe, recognize, and use basic topological and geometric properties of sets, and know how they play a role in the properties and behaviour of functions.
- Recognize how functions arise in diverse geometric and algebraic contexts and then apply analytic concepts. This involves the ability to apply appropriate approaches to locate extreme values of (scalar valued) functions, and to explicitly compute partial derivatives, Jacobian matrices and determinants of functions without a given explicit description
- Describe, define, and be able to apply concepts and methods involving integration of functions. This culminates in the ability to move between and have facility with several types of notations involving integration of vector valued functions (vector fields) over oriented curves and surfaces, and to state, calculate and explore the interrelationships of types of integrals via: the fundamental theorem for line integrals, Green's theorem, Gauss' divergence theorem, and Stokes' Theorem.
- Appreciate and recognize the use and application of these mathematical developments in diverse fields.

Electronically Approved - Mar 23 2020 14:05

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**Department Approval**

Electronically Approved - Mar 23 2020 17:28

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**Associate Dean's Approval for alternate final examination arrangements or remote learning and out of regular class-time activity**