

## COURSE INFORMATION SHEET

**FALL 2006**

1. **Course:** **MATHEMATICS 249 - Introductory Calculus**  
**Lecture/Time/Session:** L05 TR 11:00 ENE239  
 L05 F 15:00 ENE239  
**Instructor(s):** Dr. Clifton Cunningham  
**Office/Phone/Email:** MS528 220-6888 [cunning@math.ucalgary.ca](mailto:cunning@math.ucalgary.ca)  
**Office Hours:** 'Coffee Hour' (by appointment) Tuesday 12:15-13:15  
**Course Website:** <http://blackboard.ucalgary.ca>

2. **Prerequisites:** A grade of 70% or higher in Pure Mathematics 30 or equivalent.

**NOTE:** Not open to students with 60% or higher in Math 31, except with special departmental permission. Credit for more than one of MATH 249, 251 and AMAT 217 will not be allowed.

**NOTE:** The Faculty of Science policy on pre- and co-requisite checking is outlined in the current University Calendar (see [www.ucalgary.ca/pubs/calendar](http://www.ucalgary.ca/pubs/calendar)) *Faculty of Science, section 5C*. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**

3. **Fee policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.
4. **Academic Accommodations:** It is the student's responsibility to request academic accommodations. A student with a documented disability who may require academic accommodation must register with the Disability Resource Centre to be eligible for formal academic accommodation. DRC registered students are required to discuss their needs with the instructor no later than fourteen (14) days after the start of this course.
5. **The University policy on grading and related matters** is described in the current University Calendar, *Academic Standings*. In determining the overall grade in the course, the following weights will be used:

Assignments	[10]	10%
Quizzes	[4]	20%
Mid-term Test	[1]	20%
Final Exam		50%

**There will be a final examination scheduled by the Registrar's Office.** A passing grade on the final examination is necessary to passing the course as a whole.

6. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined in the current University Calendar, *Faculty of Science, section 6A*. It is the student's responsibility to familiarize herself/himself with these regulations
7. **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 current University Calendar under the heading *Student Misconduct* and the information on integrity at: [www.ucalgary.ca/honesty](http://www.ucalgary.ca/honesty)
8. **Dates and times of class exercises held outside of class hours (evening tests, Saturday laboratory examinations, weekend field trips, etc.):**  
 REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY  
**THERE WILL BE NO OUT OF CLASS ACTIVITY SCHEDULED FOR THIS COURSE.**
9. **Text:** *Calculus: Single Variable*, Sixth edition.  
 This book will be very helpful as a source of extra reading and extra exercises, so you are strongly encouraged, but not required, to buy this book.  
**Author:** Adams

10. **Quizzes:** There will be four quizzes, administered during the regularly scheduled labs of this lecture section. There will be one mid-term test and a two-hour final exam. A passing grade on the final exam is necessary to pass the course.

If you are registered in a lab/tutorial on Mondays (*i.e.*, B17 or B18) then you will write quizzes 1a, 2a, 3a and 4a in MS317 on the dates indicated in the Course Outline below; on all other weeks your lab/tutorial will be held in the room indicated below. Likewise, if you are registered in a lab/tutorial on Tuesdays (*i.e.*, B19 or B20) then you will write quizzes 1b, 2b, 3b and 4b in MS317 on the dates indicated in the Course Outline below; on all other weeks your lab/tutorial will be held in the room indicated below.

All labs/tutorials begin the week of September 18th.

B17: Mondays, 15:00-15:50 in MS371 with A. Pratt.  
 B18: Mondays, 15:00-15:50 in MS325 with B. Sabbagh.  
 B19: Tuesdays, 15:00-15:50 in MS371 with C. Cunningham.  
 B20: Tuesdays, 15:00-15:50 in MS325 with A. Pratt.

11. **Calculators ARE NOT** permitted at quizzes, mid-term test, or the final exam.
12. **Homework/Assignments:** Homework problems will be assigned weekly. These are to be completed on-line at <http://webwork.ucalgary.ca>. Each student will have an account and the assignments can be done from any computer with web access. Your answers to the assignment questions will be checked and marked (by the computer) as right or wrong only. Details about the system and how to use it will be presented during the term. All assignments will be due 12:01 am on the Sunday indicated on the Course Outline below.
13. **Continuous Tutorial:** In addition to the instruction provided by their lecturer and tutorial instructor, there is a continuous tutorial available where students may obtain individual help with questions about the course material and exercise problems. Faculty members and graduate students will be available in the continuous tutorial room to answer questions in a one-to-one fashion. The Continuous Tutorial will be held in MS365, MTWR 11:00 --15:00 and F 11:00 --14:00.
14. **SCUM**  
 The Society for Calgary Undergraduate Mathematics is located in MS337A. They sell exam packages, run final reviews, and can often assist with problems. The office is open from 10am to 3pm Monday-Friday, and you are welcome to drop by. They look forward to meeting you!

#### SCHEDULE/OUTLINE:

Week	Topic and Textbook sections	Quiz	Assignment
September 11	Real Numbers P1, P2, P3, P4, P5		-1(P1-P7)
September 18	Limits, P6, P7, 1.1, 1.2		0 (P1-P7)
September 25	Continuity, 1.3,1.4, 2.1	1a	1 (P1-1.1)
October 2	Differentiation, 2.2, 2.3, 2.4	1b	2 (1.2-1.4)
October 10	Mean Value Theorem, 2.5, 2.6, 2.7		3 (2.1-2.4)
October 16	Implicit Differentiation, 2.8, 2.9, 2.10, 2.11	2a	4 (2.5-2.7)
October 23	Exponential and logarithm, 3.1, 3.2, 3.3, 3.4	2b	5 (2.8-2.11)
October 30	Extreme values, 4.1, 4.2	3a	6 (3.1-3.3)
November 6	Curve sketching, 4.3, 4.4, 4.5	3b	7 (4.1-4.2)
November 13	Extreme value problems, 4.5 <b>In-class test on 17th</b>		
November 20	Approximations, L'Hôpital's Rule, 4.7, 4.9, 5.1		8 (4.3-4.5)
November 27	Integration, 5.2, 5.3, 5.4, 5.5	4a	9 (4.6-5.3)
December 4	The Fundamental Theorem of Calculus, 5.6, 5.7	4b	10 (5.4-5.7)

15. **CALCULUS CONNECTIONS**  
 Calculus Connections is a companion course to Calculus I offered by Y. Elsabrouty. There are no prerequisites and there is no cost to the student. The Monday/Wednesday sessions will review the relevant high school material, while the Tuesday/Thursday sessions will integrate the background material with the calculus topics and explain the main concepts, give examples and strategies. Added to this are midterm and final examination reviews. The schedule is available at: <http://www.math.ucalgary.ca/education/undergrad/> under the course listing.