



Faculty of Science  
DEPARTMENT OF MATHEMATICS AND STATISTICS  
Course Information Sheet

1. **Course:** MATHEMATICS 249 -- INTRODUCTORY CALCULUS  
**Lecture/Time/Session:** L01 MWF 09:00 ST 145 FALL 2003  
T 12:30  
**Instructor(s):** V. Stastna  
**Office/Phone/Email:** MS 456 220-3345 vstastna@math.ucalgary.ca

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

**Note:** Not open to students with 60% or higher in Mathematic 31, except with special departmental permission.

**NOTE:** The Faculty of Science policy on pre- and co-requisite checking is outlined on page 198 of the 2003-2004 Calendar. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course. If they do not, they will be withdrawn from the course without notice.**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. **The University policy on grading and related matters** is described on pages 41-42 of the 2003-2004 Calendar. In determining the overall grade in the course, the following weights will be used:

Mid-term Test	[1]	20%	
Quizzes	[5]	30%	[Best_4_of_5_]
Final Exam		50%	

**There will be a final examination scheduled by the Registrar's Office.** A passing grade on each/any particular component of the course is essential to passing the course as a whole.

5. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are outlined on page 199, of the 2003-2004 Calendar. It is the student's responsibility to familiarize herself/himself with these regulations.

6. **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 2003-2004 University Calendar under the heading "Student Misconduct", pages 53-56.

7. **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 IS NO OUT OF CLASS ACTIVITY SCHEDULED FOR THIS COURSE.

8. **Text:** Adams, *Single Variable Calculus* OR *A Complete Course*, any edition
9. There will be five quizzes, each of duration 35 minutes or less, 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.
10. Non-programmable and non-graphing calculators **ARE** permitted at quizzes, mid-term test, or the final exam.
11. 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 location and hours of operation of the continuous tutorial will be announced by the lecturer.
12. **QUIZ AND TEST SCHEDULE:**

Quizzes will be held in the labs during the **WEEKS STARTING:** Sept. 15, 29, Oct. 13, Nov. 17 and Dec. 1.

Midterm will be held in class: October 31, 2003.

**TENTATIVE CALENDAR:**

Section references are from the 5th edition of *Single Variable Calculus* by Adams.

Week	Sections				Topics
1	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	P <sub>4</sub>	Inequalities, lines, circles
2	P <sub>5</sub>	1.2	1.3		Functions, limits
3	1.3	1.4	2.1		Continuity, tangent lines
4	2.2	2.3	P <sub>6</sub>		Derivative, rules, trigonometry
5	2.4	2.5	2.6		Derivative of trigs, Chain Rule
6	2.7	2.8			Higher derivative
7	2.9	2.10	(3.1)		Implicit differentiation, antiderivative
8	M	3.2	3.3		Exponential and logarithmic functions, growth, decay
9	3.4	4.2	4.3		Extreme values, increasing/decreasing functions
10	X	4.3	4.4		Concave up/down, graphing
11	4.5	4.7	4.9		Applied max/min problems, linear approximation
12	5.2	5.3	5.4		L'Hopital Rule, definite integral
13	5.5	5.6	Review		Fundamental Theorem; substitution method

13. **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. We look forward to meeting you!