

UNIVERSITY OF CALGARY DEPARTMENT OF MATHEMATICS AND STATISTICS COURSE OUTLINE

1. Course: MATH, 249, Introductory Calculus

L01: MTWF, 08:00-08:50, CHC 119, Mark Bauer, Office MS 386 Tel.No.(403)210-8456, e-mail bauerm@ucalgary.ca,

Office Hours: TW 09:00-10:00

L02 MWRF 16:00 - 16:50 ICT102 M.Greenberg Office MS434 Tel.No 220-3952 e-mail mgreenbe@ucalgary.ca Office Hours: WR 13:00-14:00

L03 MWRF 13:00 - 13:50 CHC119 J. Ling Office MS 416 Tel. No 220-3958 e-mail jling@ucalgary.ca Office Hours: MWF 14:00-14:50

L04 TWRF 14:00 – 14:50 ST141 A. Steele Office MS457 Tel. No 210-7252 e-mail gsteele@ucalgary.ca Office Hours: Wednesday 13:00 – 14:00 or by appointment

L05 MTWF 13:00 - 13:50 ST143 M. Cavers Office MS 550 Tel. No 220-6305 e-mail mcavers@ucalgary.ca Office Hours: MW 14:00 - 15:00

The common course webpage will be hosted on Desire 2 Learn (D2L), under the name MATH 249 Fall 2013.

Department of Mathematics and Statistics - MS476 Telephone number - 403-220-5210

- 2. Prerequisites: A grade of 70 per cent or higher in Mathematics 30-1 or Pure Mathematics 30. (Alternatives are presented in C.1 Mathematics Diagnostic Test in the Academic Regulations section of this Calendar).
- **3. Grading:** The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Assignments (10) 10%
Midterm tests (2) 40% (Evening of Oct. 17 and Nov. 20)
Final Examination 50% (To be scheduled by the Registrar)

A passing grade on the final exam is required to receive an overall grade of C- or better in the course. This is to ensure that those students who receive a C- or better have a reasonable chance of succeeding in courses that require this course as a prerequisite.

Each piece of work (midterm tests and 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 D grade or lower will result if the student does not pass the final], The conversion between course percentage and letter grade is given below:

Letter Grade Conversions			
Letter Grade	% range		
A+	>95		
Α	90-94.5		
A-	85-89.5		
B+	81-84.5		
В	77–80.5		
B-	73–76.5		
C+	69-72.5		
С	65-68.5		
C-	61-64.5		
D	55-60.5		
F	<55		

- **4. Missed Components of Term Work:** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in Section 3.6. It is the student's responsibility to familiarize himself/herself with these regulations. See also Section E.6 of the University Calendar
- 5. Scheduled out-of-class activities:

Midterm 1: Thursday, October 17, 19:00-21:00.

Midterm 2: Wednesday, November 20, 19:00-21:00.

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. Course Materials: "Single Variable Calculus: Early Transcendentals HYBRID (with eBook and Enhanced WebAssign)", Seventh Edition, by Stewart, Brooks/Cole – sold in the University Bookstore.

Online Course Components: Online homework through WebAssign is available on any computer that has internet access to those who opt to purchase the above textbook package. Those who do not purchase the textbook will be given access to just the homework component through select computer labs on campus. Either way, you are responsible for completing homework in a timely fashion. The choice is up to you if you would prefer the flexibility of working on your homework from anywhere and access to the eBook. The homework is a critical element to help prepare you for the exams and help you self assess your progress in the course.

7. Examination Policy: Calculators (or any other electronic aid) are NOT permitted in the midterm tests or the final. Students should also read the Calendar, Section G, on Examinations.

8. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- (a) 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
- (b) Assembly Points: In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.
- (c) Academic Accommodation Policy: Students with documentable disabilities are referred to the following links: Calendar entry on students with disabilities and Student Accessibility Services. MSC452 Phone: 220-8237
- (d) Safewalk: Campus Security will escort individuals day or night (http://www.ucalgary.ca/security/safewalk/). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, 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 also http://www.ucalgary.ca/secretariat/privacy.
- (f) Student Union Information: VP Academic Phone: 220-3911 Email: suvpaca@ucalgary.ca SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca Student Ombudsman Phone: 220-6420 Email: ombuds@ucalgary.ca
- (g) Internet and Electronic Device Information: You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

Tentative Schedule

Week	Date	Topic	Events
1	Sept. 9-13 App. A-D		
		Numbers, Inequalities, Absolute Values,	
		Coordinate Geometry and Lines,	
		Trigonometry	
2	Sept. 16-20	1.1-1.3, 1.5, 1.6, 2.1	
		Functions, Essential Functions, Combining	
		Functions, Exponential, Logarithms and	
		Inverse Functions	
3	Sept. 23-27	2.2, 2.3, (2.4), 2.5	
		Introduction to Tangent, Limits of Functions,	
		Calculating Limits, (Precise Definition of	
		Limit), Continuity	
4	Sept. 30-Oct. 4	2.5-2.8	
		More on Continuity, Limits at Infinity,	
		Derivatives	
5	Oct. 7-11	2.8, 3.1-3.3	
		More on Derivatives, Derivatives of	
		Polynomial and Exponentials, Product and	
		Quotient Rule	
6	Oct. 14-18	Midterm Review, 3.4	Midterm 1
		Chain Rule	No Class on Monday
7	Oct. 21-25	3.5-3.8	
		Implicit Differentiation, Derivatives of	
		Logarithms and Inverse Functions, Rates of	
		Change, Exponential Growth and Decay	
8	8 Oct. 28-Nov. 1 3.9, 3.10, 4.1, 4.2		
		Related Rates, Linear Approximations,	
		Maximum and Minimum Values, Mean	
		Value Theorem	
9	Nov. 4- Nov. 8	4.3-4.5	
		Derivatives and the Shape of the Graph,	
		Curve Sketching, Indeterminate Forms and	
		l'Hospital's Rule	
10	Nov. 11 – Nov. 15	4.7, 4.8	No Class Monday
		Optimation Problems, Newton's Method	and Tuesday
		Midterm Review, 4.9, 5.3	Midterm 2
		Antiderivatives, Fundamental Theorem of	
		Calculus	
12	Nov. 25 –Nov. 29	5.3-5.5	
		Fundamental Theorem of Calculus,	
		Indefinite Integrasl and the Substitution Rule	
13	Dec. 2 – Dec. 6	5.1, 5.2, 6.1	
		Formal Definition of Definite Integrals	