

MATH 1000: DIFFERENTIAL & INTEGRAL CALCULUS I

SUMMER 2010 – TERM B

COURSE DETAILS

Time & Location: Monday and Wednesday, 6:05–8:45pm in LSC C206.

Instructor: Rebecca Keeping

Email: rkeeping@mathstat.dal.ca

Office: Chase 352

Office hours: Monday 3-5pm, Wednesday 12-2pm, or by appointment (in class or by email).

Course website: Assignments, solutions, and course updates will be posted on the following site:
www.mathstat.dal.ca/rkeeping/m1000.html

Calendar description: This class offers a self-contained introduction to differential and integral calculus. The topics include functions, limits, differentiation of polynomial, trigonometric, exponential and logarithmic functions, product, quotient and chain rules, applications of differentiation, antiderivatives and definite integrals, integration by substitution.

Textbook: *Single Variable Calculus: Early Transcendentals, Sixth Edition*, by James Stewart.

EVALUATION & OUTLINE

Quizzes: (1% each.) A quiz will sometimes be given during the break (~7:20–7:30), to ensure comprehension of essential concepts. Students are permitted to ask the instructor (but not each other!) for help.

Assignments: (30%, less the no. of quizzes.) Homework will be assigned after each class and due at the start of the following class. Students may work together but must write their solutions independently.

Midterms: (15% each.) Midterms 1 and 2 will be written in the first hour of class on July 21 and Aug 4.

Final exam: (40%.) A comprehensive final will be written in our regular classroom during the last class.

Outline: The following is a tentative course schedule, with section numbers from the Stewart text. Any changes to the outline will be posted on the course website.

WEEK	DATES	TOPIC	MONDAY	WEDNESDAY
1	July 5 – 7	Limits and the derivative	2.1, 2.2, 2.3	2.5, 2.7, 2.8
2	July 12 – 14	Differentiation rules	3.1, 3.2, 3.3	3.4, 3.5, 3.6
3	July 19 – 21	Applications of differentiation	3.7, 3.8, 3.9, 3.10	Midterm 1 , 4.1, 4.2, 4.3
4	July 26 – 28	Curve sketching / optimization	2.6, 4.4, 4.5	4.5, 4.7
5	Aug 2 – 4	Anti-derivatives	No class (Natal Day)	Midterm 2 , 4.9
6	Aug 9 – 11	Integrals	5.1, 5.2, 5.3	5.4, 5.5
7	Aug 16 – 18	—	Review	Final exam (in class)

STUDENT RESOURCES

Learning centre: Math TAs are available in LSC 206 from 11am to 2pm (M–F) and 4 to 6pm (M–Th).

Academic dates: Add and drop dates for summer term (B) can be found at <http://ug.cal.dal.ca/acdt.htm>.

University regulations: Students are expected to be familiar with regulations at <http://ug.cal.dal.ca/UREG.htm>.

Students with disabilities: Students are encouraged to register as quickly as possible at Student Accessibility Services (www.studentaccessibility.dal.ca) if they wish to receive academic accommodations.