

MATH 105 101 - Fall 2014

Integral Calculus with Applications to Commerce and Social Sciences

Instructor: Athena Nguyen

Email: athena@math.ubc.ca

Web Page: <http://www.math.ubc.ca/~athena/index.html>

Office: Auditorium Annex 126

Lectures: TTh 15:30-16:50 - Buchanan A102

Textbook: Calculus: Early Transcendentals, fourth custom edition for UBC,
by Briggs and Cochran

Office Hours: Wednesday: 9:00- 11:00 or by appointment via email

Course outline

The following is the tentative lecture plan for the course:

Week 1 (Sep 9 , Sep 11)	Planes and surfaces (12.1) Graphs and level curves (12.2)
Week 2 (Sep 16 , Sep 18)	Partial derivatives (12.4) Maximum/minimum problems (12.8)
Week 3 (Sep 23, Sep 25)	Maximum/minimum problems (12.8) Lagrange Multipliers (12.9)
Week 4 (Sep 30, Oct 2)	Approximating areas under curves (5.1) Definite integrals (5.2)
Week 5 (Oct 7, Oct 9)	Fundamental Theorem of Calculus (5.3) Substitution Rule, Integration by parts (5.5, 7.1)
Week 6 (Oct 14, Oct 16)	Trigonometric integrals (7.2) Trigonometric substitutions, partial fractions (7.3, 7.4)
Week 7 (Oct 21, Oct 23)	Numerical Integration (7.6) Improper Integrals (7.7) Introduction to Differential equations (7.8)
Week 8 (Oct 28, Oct 30)	Probability
Week 9 (Nov 4, Nov 6)	Sequences (8.1, 8.2) Infinite Series (8.3) Divergence Test, Integral Test (8.4)
Week 10 (Nov 11, Nov 13)	Ratio Test, Comparison Test, Limit Comparison Test (8.5) Approximating functions with polynomials (9.1) Properties of power series (9.2)
Week 11 (Nov 18, Nov 20)	Taylor Series (9.3, 9.4)
Week 12 (Nov 23, Nov 25)	Review

Marking Scheme

Assignments - 10%

Webworks - 10%

2 Midterms - 30% (15% each)

Final Exam - 50%

The tentative dates for the Midterms are:

Oct 2, 2014, and Oct 30, 2014 for the first 50 minutes of lecture time in class.

Final Exam: TBA.

Assignment Policy

There will be approximately 6 assignments, 5 of which will count toward the Assignments component. The worst assignment mark will be dropped.

Assignments will be collected at the beginning of the class. Late or missed assignments will result in a mark of zero.

Students are allowed (and encouraged) to collaborate on assignments but make sure that the work submitted is your own.

Exam Policy

Midterms are non-cumulative; the chapters that will be covered on each midterm will be announced in class. The final exam is based on the entire syllabus of the course.

If a student misses a midterm, that student shall provide a documented excuse or a mark of zero will be entered for that midterm. There will be no make-up midterms, and the weight of the missed midterm will be transferred to the final examination. To be eligible for this arrangement, you must notify the instructor within a week of the missed midterm with appropriate documentation for your absence.

If a student misses a final examination, that student will need to present the situation to your faculty's Advising Office to be considered for a deferred exam. Your performance in the course up to the exam will be taken into consideration in granting a deferred exam status. For deferred exams in mathematics, students generally will write in the next available exam of the same course, which can be several months after the original exam.

Academic Misconduct

UBC takes cheating incidents very seriously. After due investigation, students found guilty of cheating on tests and examinations are usually given a final grade of 0 in the course and suspended from UBC for one year.

Note that academic misconduct includes misrepresenting a medical excuse or other personal situation for the purposes of postponing an examination or quiz or otherwise obtaining an academic concession.

Please check the course website for other policies and regulations.