

MAT136Y Calculus I(B)

Syllabus

(2017 May – August)

Course Description

This is a first-year introduction to integral calculus containing some applications to the sciences. Theorems will be stated precisely, mostly without proofs, but with an indication of the mathematical ideas involved. Topics to be discussed include: antiderivatives, integration and the Fundamental Theorem of Calculus, techniques of integration, applications (areas, volumes, arc length, etc.), introduction to differential equations and some applications, sequences and series, and Taylor series.

Prerequisites

MAT135H1 or MAT125H1

Textbook

(required) J. Stewart, *Single Variable Calculus Early Transcendentals*, 8th edition

ISBN-13: 978-1-305-27033-6

(optional) *Students Solution Manual* for the above textbook

You may study from an older edition of Stewart if you wish, but problem sets will assign questions from the 8th edition. It is your responsibility to have access to these questions.

Instructors

Li Chen `il.chen@mail.utoronto.ca`

Teaching Assistants

Adriano Pacifico `adriano.pacifico@mail.utoronto.ca`

Lectures and Tutorials

Our first lecture is on May 16, 2017 and our last lecture is on August 10, 2016.

<i>Section</i>	<i>Time</i>	<i>Location</i>	<i>Instructor</i>
LEC0101	T 10 – 12	BA 1210	Li Chen
	R 10 – 11	BA 1210	
TUT0101	T 15 – 16	BA 2155	Adriano Pacifico
TUT0201	R 15 – 16	BA 2155	Adriano Pacifico

Recording or taking pictures in class is strictly prohibited without the consent of your instructor, with the sole exception that you are taking photos of the blackboard for note taking purpose, provided that your flash is off.

Email Policy

- Please send email for administrative purposes only. For math questions, please ask your instructor/TA in person during class or office hours.
- You must use your ****@mail.utoronto.ca email account when sending us emails. Otherwise, they may be filtered as spam and deleted automatically.

Office Hours

Li Chen's office hour: Thursday 11 am – 1 pm, BA Consultation Room

Blackboard

All announcements, term work grades, problem sets, and other course materials will be posted on Blackboard (portal.utoronto.ca).

You are expected to check Blackboard regularly. All announcements posted are considered to have been announced to the class and not having read or seen an announcement **is not** an accepted reason for not following guidelines or missing deadlines. You may configure your preferences on Blackboard to receive email notification as soon as an announcement has been posted.

Quizzes

There will be a total of 9 quizzes to be held in the last 10 minutes of tutorial. Only your best 7 of 9 quizzes will be counted towards 15% of your final grade. Quiz questions will be similar to those found on *Problem Sets*. You must write the quiz in your assigned tutorial; otherwise, you will receive a zero for the quiz. There will be no make-up quizzes (see *Missing a Term Test or a Quiz* for details). The dates of the quizzes can be found in the *Course Schedule*.

Problem Sets

Problem sets for each tutorial will be available on Blackboard about one week in advance of the tutorial. These problem sets will *not* be graded; however, your quizzes will be similar to one of the problems from the problem set. To succeed in this course, you should regularly complete the problem sets.

Tutorials

Tutorials begin on Tuesday, May 23 and are held once a week.

- *How should I prepare for tutorial?*

Work on the problem set beforehand. If you have questions, you will be able to ask your TA for help. Bring your textbook and problem set to tutorial.

- *What will I be doing in tutorial?*

Your TA will spend part of the time discussing questions on the problem set. You will spend part of the time working on the problem set while your TA walks around to help. You may be asked to work in groups or independently. Tutorials will usually have a 10 minute quiz at the end. See *Quizzes* or *Course Schedule* for details.

As with lectures, recording or taking pictures in tutorial is strictly prohibited without the consent of your TA. Please ask before doing.

Midterm Test

There will be one midterm tests, 110 minutes in duration. More details will be announced later. The regular sitting of the midterm is scheduled for Thursday June 22th, 2017 from 14:10 – 16:00 noon in EX 300.

Missing a Term Test or a Quiz

If you have an academic conflict with the regular sitting of the midterm (e.g. a tutorial, lecture, or lab for another course), then you must inform your instructor no later than one week before the test. Assuming you obtain approval, you will write the early sitting of the corresponding test TBA. If you have an academic conflict with both the early sitting and the regular sitting then your grade will be adjusted by increasing the final exam component of your work.

If you miss the midterm test or a quiz for any other legitimate reason (e.g. severe illness), you should notify your instructor as soon as possible, no more than 48 hours after the missed midterm/quiz, to obtain special permission and provide proper documentation (see *Medical Notes and other Documentation* for details). You should submit your documentation to your instructor no later than one week after the day of the midterm/quiz. There will be no make-up midterm test or quizzes so your grade will be adjusted by increasing the final exam component of your work.

Reasons which are not legitimate include but are not limited to:

- “I have been extremely busy recently because of personal reasons and do not have enough time to prepare for the test.”
- “I have other tests on the same day as the MAT136 test (which do not have a direct time conflict with the MAT136 test).”
- “My employment has a direct time conflict with the MAT136 test.”
- “I have another test at the same time as my MAT136 quiz.”

If you skip a test or quiz without prior approval, you will receive a zero for the test or quiz (unless the absence is due to an illness or exceptional circumstances and properly documented).

Medical Notes and other Documentation

The University’s “Verification of Illness and Injury” form (illnessverification.utoronto.ca) is the **only** acceptable form of direct medical documentation. For non-medical documentation, please see these [guidelines](#) by the Faculty of Arts and Science and the corresponding [petition form](#) if relevant.

Grading Scheme

Your grade will be:

$$15\% \text{ Quizzes} + 35\% \text{ Midterm Test} + 50\% \text{ Final Exam}$$

Note the “15% Quizzes” only counts your best 7 out of 9 quizzes. Each of your best 7 quizzes is therefore worth approximately 2.1% of your grade.

Your raw scores for quizzes and term tests will be posted on *Blackboard*. If there are any discrepancies, please contact your instructor immediately; do not wait for weeks to go by.

Final Exam

Our final exam will be held the week of August 14 – 18, 2017 and is scheduled by the Faculty of Arts and Science. The timetable will be posted on the Arts and Science website on July 21, 2017.

Accessibility Services

The University of Toronto is committed to accessibility. If you require additional academic accommodations, please contact Accessibility Services as soon as possible (studentlife.utoronto.ca/as).

Other Resources

If you are having difficulties succeeding in this course due to academic, personal, or financial circumstances, you can find some very helpful people at your college registrar (artsci.utoronto.ca).

Academic Integrity

Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves.

Familiarize yourself with the University of Toronto's Code of Behaviour on Academic Matters:

governingcouncil.utoronto.ca/policies/behaveac.htm

It is the rule book for academic behaviour at the U of T, and you are expected to know the rules. A simplified version is available here:

[What is academic misconduct?](#)

The University of Toronto treats cases of academic misconduct very seriously. All suspected cases of academic dishonesty will be investigated following the procedures outlined in the Code. The consequences for academic misconduct can be severe, including a failure in the course and a notation on your transcript. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact your instructor. If you are experiencing personal challenges that are having an impact on your academic work, please speak to your instructor or seek the advice of your college registrar.

Course Schedule

This schedule below is tentative and subject to change; however, the dates of term tests and quizzes are confirmed. Lecture content lists the relevant textbook sections in Stewart.

Week of	Lecture Content	Additional Notes
May 15	5.1, 5.2	No tutorial
May 22	4.9, 5.3, 5.4	Quiz 1 in tutorial
May 29	5.5, 7.1, 7.2	Quiz 2 in tutorial
June 5	7.3, 7.4, 7.5	Quiz 3 in tutorial
June 12	6.1, 6.2, 6.3, 6.5	Quiz 4 in tutorial
June 19	9.1, 9.3, 9.4	No quiz in tutorial
June 22	EX 300, 14:10 – 16:00	Midterm Test
July 3	11.1, 11.2	Quiz 5 in tutorial
July 10	11.2 (ctd), 11.3, 11.4	Quiz 6 in tutorial
July 17	11.5, 11.6	Quiz 7 in tutorial
July 24	11.7, 11.8	Quiz 8 in tutorial
July 31	11.9, 11.10	Quiz 9 in tutorial
August 7	Review/Catch up	No quiz in tutorial

Tutorials and corresponding *Problem Sets* will focus on content from the previous week. For example, in the first tutorial in the week of May 22 you will discuss lecture material from the week of May 15.