

Course Syllabus: Math 1560 A
Calculus I
Department of Mathematics and Computer Science
University of Lethbridge, Summer 2017

Course instructor: Sean Fitzpatrick **Office:** C540
Course website: via moodle.uleth.ca
Office hours and contact information: Available on Moodle
Lectures: TR 9:00 - 11:50 am in AH116
Tutorials: TR 1:00 - 1:50 pm or 2:00 - 2:50 pm in AH177

Course Description

This is an introductory course in Calculus. Topics covered include limits, continuity, derivatives and their applications, and integration. The focus of the course will be on computational proficiency and conceptual understanding. There will be some discussion of theory and proof; students will be responsible for knowing and understanding definitions and theorems, but there is very little in the way of formal proof.

Course Objectives

A students in this course will be expected to:

- Be familiar working with elementary functions such as polynomial, rational, exponential, logarithmic, and trigonometric functions.
- Develop computational proficiency with limits, derivatives, and integration.
- Analyze and solve both conceptual and applied problems using the techniques of calculus.
- Interpret and apply definitions and theorems, and write logical arguments using complete sentences.

Required Textbook:

The course textbook is an OER (*Open Educational Resource*) text. It is an open text, based on an existing textbook, but customized to fit the content of Math 1560. The e-book is available as a free PDF document on our Moodle page, and can also be accessed at <http://www.cs.uleth.ca/~fitzpat/Textbooks/Texts.html>. If you want a hard copy of the textbook, you can print it yourself*, or ask the Bookstore to do it for you. The Bookstore makes the text available as a print-on-demand coursepack; most requests are processed by the next day.

*If you choose to print the book yourself, be sure to download the black-and-white version of the PDF for black-and-white printing.

Evaluation

Your grade will be determined according to the following table (see below for explanations of each component):

Component	Tutorials	Online Assignments	Term Tests	Final
Weight	15	10	25 + 10	40

Tests:

There will be 5 in-class tests, written every Thursday, except for Thursday May 10th. These will be *two-stage tests*: for each test there will be an individual stage, worth 5% of your grade, followed by a group stage, worth 2% of your grade.

Tutorials:

The tutorial grade will be based on an in-class assignment to be completed during tutorial. You will be able to discuss the problems with your classmates and ask me for help.

Online Assignments:

There will be weekly online homework assignments. Each assignment is accessed via Moodle. The online homework questions are graded automatically by the computer, and in most cases you will be allowed an unlimited number of attempts to correctly answer each problem.

Final exam:

The final exam will be **cumulative**.

Letter grade conversions:

The percentage grades earned in this class will be converted to letter grades according to the following table:

Letter grade:	A ⁺	A	A ⁻	B ⁺	B	B ⁻	C ⁺	C	C ⁻	D ⁺	D	F
Minimum % required:	95	88	85	82	75	72	70	65	62	57	50	0

Course policies

Homework:

The easiest way to master the material in Math 1560 is to do as many exercises as you can. In addition to the assignments, you will find many exercises in the course textbook. Working in groups is highly recommended, and if there are problems that you don't understand, you should see me sooner rather than later. Doing a little bit of work on a regular basis is easier and more effective than trying to cram before the exams. (The online homework and tutorials are designed to keep you on pace.) You are also encouraged to use the online forum to ask questions.

Communication:

Communication between students and myself can take place in several ways:

- Announcements on Moodle. Any updates and reminders will be posted on Moodle. These announcements will be sent to your uleth.ca email address by default, so be sure to monitor that account. It is also highly recommended that you log into Moodle on a regular basis to keep up to date on the course.
- In person, during office hours. (Recommended, especially if you are having trouble with a concept.)
- Online discussion forum, via Piazza.com.
- Email. You are welcome to email me with questions about the course, and I will do my best to answer as soon as I can. I do, however, have a few email etiquette rules:
 - Please use **only** your University of Lethbridge email address.
 - The subject line should reference this course, and your message should contain your full name.
 - Questions about how to solve a particular homework problem should be directed to the discussion forum rather than email: the discussion forum can properly display math symbols, and it's usually the case that several students will have the same question.
 - Questions that can be answered by reading this syllabus (e.g. "When's the test?") will usually not be answered in a timely fashion, and the replies will generally be grumpy/sarcastic in nature.

Calculators:

For term tests you will be allowed to use a simple **five function** calculator. (That is, you can use a calculator that is limited to addition, subtraction, multiplication, division, and percentages.) Scientific and graphing calculators are **not** permitted. As long as this rule is followed for both tests, the same simple calculator will be allowed for the final exam.

Special arrangements:

If you are a student who has registered for accommodations with the Accommodated Learning Centre, please ensure that I am informed of the necessary arrangements as soon as possible, and please feel free to meet with me if there are any adjustments I can make to improve your learning experience.

Academic honesty:

Students are expected to be familiar with, and abide by, the rules laid out in the Academic Calendar regarding academic honesty, cheating, etc. and the penalties assessed for disregarding those rules.