

# Course Syllabus: Math 1560 A & B Calculus I

Department of Mathematics and Computer Science  
University of Lethbridge, Fall 2017

**Course instructor:** Sean Fitzpatrick      **Office:** C540  
**Course website:** via moodle.uleth.ca  
Office hours and contact information: Available on Moodle  
**Lectures:** Section A – TR 10:50 am - 12:05 pm in PE261  
Section B – TR 1:40 pm - 2:55 pm in PE261

## 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 for tests, and may be asked to come up with a short argument on a written assignment.

## 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

### Letter grade conversions:

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

|                     |                |    |                |                |    |                |                |    |                |                |    |   |
|---------------------|----------------|----|----------------|----------------|----|----------------|----------------|----|----------------|----------------|----|---|
| Letter grade:       | A <sup>+</sup> | A  | A <sup>-</sup> | B <sup>+</sup> | B  | B <sup>-</sup> | C <sup>+</sup> | C  | C <sup>-</sup> | D <sup>+</sup> | D  | F |
| Minimum % required: | 95             | 88 | 85             | 82             | 75 | 72             | 70             | 65 | 62             | 57             | 50 | 0 |

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

|           |           |                 |             |       |       |
|-----------|-----------|-----------------|-------------|-------|-------|
| Component | Tutorials | Online Homework | Assignments | Tests | Final |
| Weight    | 10        | 10              | 10          | 35    | 35    |

## Evaluation components

### Tutorials:

The tutorial grade will be based on an in-class assignment to be completed during tutorial. Group work and class discussion are encouraged.

### Online Assignments:

There will be weekly online homework assignments. 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.

### Written Assignments:

There will be 5 written assignments, due at 9 am every second Wednesday, beginning on September 27th. We will devote the last 10-15 minutes of each class to the discussion of one of the assignment problems. Written assignments can be completed individually, or in groups of up to 4 members. Guidelines and rules for completion of assignments will be posted on Moodle. Note that on written assignments, presentation will be graded strictly. In particular, proper use of mathematical notation, and complete explanations in full sentences will be expected.

**Late assignments:** Late assignments are not accepted without **prior** permission. If you know you will not be able to complete your work on time, and you inform me of this fact ahead of time, I'm usually willing to grant an extension, as long as you don't make a habit of it. (Everybody gets one.) However, once the solutions have been posted, your work will not be accepted.

### Tests:

There will be 6 in-class tests, written every second Tuesday, beginning on September 19th. 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.

**Missed tests:** Your test grade will be based on your best 5 tests. You can miss one test (for any reason) without penalty. (A doctor's note, etc. is not required.) Make-up tests are not given, except in very rare circumstances (generally involving lots of advance notice). If you miss more than one test, you must contact me immediately. If you write all 6 tests, I will drop your lowest grade.

### Final exam:

The final exam will be **cumulative**. Note: a **common final exam** will be requested. Please do not book December travel until the official final exam schedule is released.

## 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.
  - I do not answer questions about mathematics via email. This is what office hours and the discussion forum are for.
  - 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.

## **Crowdmark:**

To facilitate the use of frequent two-stage tests (in place of a single large midterm) I will be using the Crowdmark online grading platform. My use of this service will involve uploading a scanned copy of your tests to their server for processing. All data remains property of the university and is destroyed after one year. If you have any concerns about this, please arrange to meet with me.

## **Important Dates**

- Wednesday, September 6th: tutorials begin.
- Thursday, September 7th: classes begin.
- Tuesday, September 19th: Test 1.
- Wednesday, September 27th: Assignment 1 due.
- Tuesday, October 3rd: Test 2.
- Wednesday, October 11th: Assignment 2 due.
- Tuesday, October 17th: Test 3.
- Wednesday, October 25th: Assignment 3 due.
- Tuesday, October 31st: Test 4.
- Wednesday, November 8th: Assignment 4 due.
- November 13th - 17th: Fall break (no classes).
- Tuesday, November 21st: Test 5.
- Wednesday, November 29th: Assignment 5 due.
- Tuesday, December 5th: Test 6, and last class.
- Wednesday, December 6th: no tutorials. (Since there is no Thursday tutorial.)
- December 9th - 18th: Final exam period.