

---

University of Lethbridge • Department of Mathematics & Computer Science  
Mathematics 1560A • Calculus I  
Course Outline • Spring 2020

---

<b>LECTURES:</b>	Section A	MWF 9.00–9.50	Room: C674
<b>TUTORIALS:</b>	Tutorial 1	Tu 12.40–13.30	Room: C630
	Tutorial 2	Tu 13.40–14.30	Room: C630
	Tutorial 3	Tu 15.05–15.55	Room: C630
<b>INSTRUCTOR:</b>	D Kaminski ( <a href="mailto:kaminski@uleth.ca">kaminski@uleth.ca</a> )		Office: C562
<b>TUTORIAL INSTRUCTOR:</b>	A Bomhof ( <a href="mailto:a.bomhof@uleth.ca">a.bomhof@uleth.ca</a> )		Office: C510
<b>TEXT:</b>	<i>Math 1560 Calculus I</i> Creative Commons freely available PDF, Sean Fitzpatrick (ed.)		
<b>METHOD OF EVALUATION:</b>	On-line assignments	10%	
	Paper-based tutorial assignments	10%	
	Term tests (2)	20% each	
	Final exam	40%	
–OR–	Final exam ONLY	100% (see below)	

**TOPICS** (from the academic calendar)

Functions. Limits. Continuity. Differentiation and integration of polynomial, rational, root, trigonometric, exponential, and logarithmic functions. Inverse functions, including inverse trigonometric functions. Applications of derivatives, including linear approximations, Taylor polynomials, Curve sketching, optimization, and related rates. Anti-derivatives. Definite integrals and Fundamental Theorem of Calculus. Change of variables.

**COMMENTS**

Calculus I is a computationally intensive course, and to extract maximum value from the course, you should anticipate doing many exercises from the text, well beyond the abbreviated list of problems that will form the assignments you must submit for grading. The tutorial associated with the lecture is an essential component of the course, and it is important that you attend the correct section in which you registered.

Be sure to read ahead in the text, when you can, so that you are well-prepared to receive the content of the lectures. The text comes in several forms. Two are PDF versions of conventional texts available for free download at

[www.cs.uleth.ca/~fitzpat/Textbooks/Math1560\\_ebook.pdf](http://www.cs.uleth.ca/~fitzpat/Textbooks/Math1560_ebook.pdf)  
[www.cs.uleth.ca/~fitzpat/Textbooks/Math1560\\_print.pdf](http://www.cs.uleth.ca/~fitzpat/Textbooks/Math1560_print.pdf)

The first version listed uses colour, whereas the second version is grey-scale for less expensive printing.

A web-based version, with embedded videos of lectures is also available at

[www.cs.uleth.ca/~fitzpat/apex-calculus/](http://www.cs.uleth.ca/~fitzpat/apex-calculus/)

which you may prefer, though when I reference the text, it will be the PDF forms I will be using, and not the web-based version.

A Moodle page for the course will be made available in the first week of the semester. There you will find a link to the PDF files for the textbook, a link to on-line assignments (“WebWork”) as well as supplementary materials for the course.

A course web page with the URL

[www.cs.uleth.ca/~kaminski/1560](http://www.cs.uleth.ca/~kaminski/1560)

will also be created in the first week of classes. There you will find a calendar showing important dates in the course, as well as updates for readings from the textbook.

Barring other commitments (such as meetings), office hours will be Thursdays from 11 AM until noon, and then again from 1 PM until 3 PM. Occasionally, other duties may require these times to be shortened or cancelled. I will try to announce in advance when this is the case.

Students are reminded that the University Final Exam Policy states that only in extraordinary circumstances may students request to write an equivalent invigilated Final Examination at other than the scheduled time and place. Students are advised that holiday or work travel plans do not constitute an extraordinary circumstance.

#### **Important dates**

Add/drop	January 13
Probable date of first term test	February 7
Reading week	February 15 – 21
Probable date of second term test	March 6
Last lecture	April 3
Last day for withdrawal from the course	April 6

In determining your grade, the following guide will be used:

If your raw score is in the	80s or higher	70s	60s	50s	40s or lower
Then your grade will be	in the A range	in the B range	in the C range	in the D range	likely an F

The assignment of grades will be tempered by historical considerations and other factors, so this is just a rough guide. In years past, for example, the lower end of the C range has dipped into the 50s, and so on.

A word, too, about how this is calculated: for this course, two raw scores are calculated for you, one based on a blend of assignments, tests and the final exam, and one based on the final exam only. I use the higher of the two scores to assign grades. *To benefit from this, a student must write both term tests and the final exam.* A student not writing a term test will have his raw score computed only as a blend of assignments, term tests and the final exam. A student not writing the final exam will be awarded an F in the course.

**Your first tutorial is scheduled for January 14.** Please make a point of attending all your tutorials for the course, as additional examples and explanations of ideas discussed in the lectures will be developed there. If you wish to attend a tutorial section different from the one in which you've registered, be sure to clear it with Arie first.