Instructor: Mathieu Lemire  
Office: 5250 Herzberg Building  
Tel.: 613-520-2600 ext. 1983  
E-mail: mathieul@math.carleton.ca or through cuLearn.

Lectures: Tuesdays and Thursdays from 8:35 to 9:55 at C164 Loeb Building. The first class is on September 4th.

Tutorials: Tutorials are scheduled to be on Thursdays from 16:35 to 17:25. The following table gives more details:

<table>
<thead>
<tr>
<th>Section</th>
<th>Room</th>
<th>TA’s name</th>
<th>TA’s connect email</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>TBA</td>
<td>Filoftia Gheorghe</td>
<td><a href="mailto:filoftiagheorghe@cmail.carleton.ca">filoftiagheorghe@cmail.carleton.ca</a></td>
</tr>
<tr>
<td>A2</td>
<td>TBA</td>
<td>Olivier Chabot</td>
<td><a href="mailto:olivierchabot@cmail.carleton.ca">olivierchabot@cmail.carleton.ca</a></td>
</tr>
<tr>
<td>A3</td>
<td>TBA</td>
<td>Siming Tian</td>
<td><a href="mailto:simontian3@cmail.carleton.ca">simontian3@cmail.carleton.ca</a></td>
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</tbody>
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Office hours: Tuesdays from 10:30 to 11:30 and Thursdays from 10:30 to 11:30. My office hours will be held at my office (See above).

Textbook: The official textbook of the course is: Single Variable Calculus: Early Transcendentals, 8th edition, by James Stewart, Brooks/Cole. You can use the book University Calculus by Hass-Weir-Thomas if you already have it. Practice problems will be assigned for both textbooks.

Prerequisites: MATH1004 or a grade of C- or higher in MATH1007; or permission of the school.

Evaluation: Your final grade will be calculated as:

Term Mark 45 % (best 3 out of 4 tests) + Final Examination 55%

Term Mark: There will be four 50-minute tests administered during tutorials on October 3rd, October 17th, November 7th and November 21st. No make up, early or delayed tests will be given.

Final exam: The final exam is a cumulative three hours closed book exam scheduled by the university. The exam period runs from December 9th to December 21st (including Saturdays). It is student’s responsibility to be available at the time of the examination. In particular, no travel plans should be made until the examination schedule is published. It is the students responsibility to find out the correct date and time of the exam and the room where it takes place. Students who missed the final examination may be eligible for a deferred exam provided that they present a doctor note or another supporting document to the Registrars Office. It is the Registrars Office and not the instructor which take decision of granting a deferred examination. After the exam is written, students may see their final examination papers. This examination review is for educational purpose only and NOT for negotiation of the grade.

Calculators: Only non-programmable and non-graphical calculators are allowed for tests and the final exam. I reserve the right to confiscate any calculator during a test or a final exam.

Practice problems lists Practice problems lists will regularly be posted on cuLearn. These problems are not to be handed in and will not be graded. However, in order to succeed in the course, it is absolutely essential to practice on a regular basis.

Withdrawal: The last day for academic withdrawal is December 6th.

Students with Disabilities: Students with disabilities who require academic accommodations in this
course are encouraged to contact the Paul Menton Centre for Students with Disabilities to complete the necessary Letters of Accommodation. After registering with the PMC, make an appointment to meet with me and discuss your needs in order to make the necessary arrangements as early in the term as possible. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Notes:

1. The best three of the four tests will be used to determine the test component of your final mark. Only a medical note or exteme misfortune will be accepted to justify the absence on a test. Electronic copies are not accepted. You must come to my office hours to show me your medical note.

2. Problem lists, comments, solutions and other informations will regularly be posted on cuLearn. It is your responsibility to look on cuLearn to obtain these informations.

3. I will not necessary follow the same order of topics as in the textbook. The best way to know where exactly we are in class is to come to class or to follow the order of topics found in the practice problems lists.

4. Coming to class is very important and I strongly encourage you to do so.

5. It is each student’s responsibility to collect the marked tests from the TA. The test papers are normally distributed in the tutorial session following the date of the test.

6. Pregnancy accommodation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services webpage.

7. Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services webpage.
Tentative Class schedule:

**IMPORTANT:** This schedule is just to give you an overview. Because of several factors, it is quite possible that the timing of topics will be changing as we go further into the course. Some topics may possibly be added and some may be removed. The practice problems lists that will be available on cuLearn will give you the exact topics covered on each week.

September 4th: Antiderivative, definition of indefinite integral

September 10th and September 12th: Basic rules of integration, Definite integral, Fundamental Theorem of Calculus

September 17th and September 19th: Substitution method, Integration by parts

September 24th and September 26th: Integration by partial fractions, Trigonometric integrals

October 1st and October 3rd: Integration by trigonometric substitution, L’Hospital’s Rule, Improper integrals

October 8th and October 10th: Sequences, Series, Geometric Series, Telescoping Series

October 15th and October 17th: Integral Test, Comparison Test, Ratio Test

**Break** Class resume on October 29th

October 29th and October 31st: Root Test, Alternating Series

November 5th and November 7th: Power Series, Radius of Convergence, Interval of convergence, Representation

November 12th and November 14th: Differentiation and Integration of Power Series, Taylor and MacLaurin Series, Binomial Series

November 19th and November 21st: Parametric equations, tangent lines, Arc length

November 26th and November 28th: Polar coordinates, Areas and Length

December 3rd and December 5th: To be determined