



MATH 2007C: ELEMENTARY CALCULUS II

Winter 2020

Instructor:	Mr. Fares Said	Lecture:	Tue. & Thu 8:35 - 9:55
Email:	fares.said@carleton.ca	Place:	Loeb C164
Office:	4220 HP	Office Hours:	17:15-18:15 on Tue. and Thur. or by appointment

Course Pages:

1. <https://www.carleton.ca/culearn/>
2. <https://students.carleton.ca/>

Objectives: This course covers Techniques of integration, improper integrals. Polar coordinates, parametric equations. Indeterminate forms, sequences and series, Taylor's formula and series.

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

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.*

Classes: start on January 7, 2020 Tuesday & Thursday, 8:35 a.m. - 9:55 a.m., in Loeb Building Room C164. The last lecture will be held on Tuesday, April 7, 2020. You are responsible for attending class and taking your own notes.

Tutorials: are scheduled to be on Thursdays from 14:35 - 15:25. **Tutorials will start on January 16, 2020.** The following table gives more details:

Tutorial	TA name	TA email	Time	Room
C1	Mia Cadieux	miacadieux@cmail.carleton.ca	Thu 14:35 - 15:25	SA 415
C2	Jung Ryu	jonathanryu@cmail.carleton.ca	Thu 14:35 - 15:25	CB 2202
C3	Michael Sloan	michaeljsloan@cmail.carleton.ca	Thu 14:35 - 15:25	SA 317

Calculator: No calculators or other memorandum will be permitted on tests or the final exam.

Tutorial Tests: There will be **three** 50-minute tests administered during tutorials on **February 6th, March 5th, and March 26th**. If you miss a test and provide adequate documentation (doctor's note, etc...), then the weighting of that test will be placed on the final exam, otherwise a mark of 0 will be given for the test. **There are no make up tests!** You must bring your student card to each test and exam and place it on your desk where it is visible. Any request to review your grade for your test or tutorial must be done directly to your TA within two weeks of receiving the grade.

Final: The final exam will be a three-hour closed book exam to be held during the period of April 13 to 25 (including Saturdays and Sundays), 2020. Please check the link provided on CuLearn to confirm the exact date and location of the final exam as that period approaches. Students who wish to review their final examination paper must do so within one week from the release of final grades. This privilege is for educational purposes and not an opportunity to argue about the marking.

Grading Scheme:

- *Three Tests (45%), (15% each)*
- *Final Examination (55%).*

The above grading scheme applies only when the Total tests grade is at least 25/45. A Tests Grade of less than 25/45 will automatically result in a failure with the final grade of F, regardless of the result of the final exam.

TA Office Hours: Check CuLearn for more details.

Tutorial Centre: 3422 HP (near the Science Student Success Centre): This is a drop-in centre where students in elementary courses can get one-on-one help in mathematics and statistics, on a 'first come first serve' basis. For more information, including hours of operation, see: <http://www5.carleton.ca/math/math-tutorial-centre/>

MS-LAP: Online support is available for this course through MS-LAP. You should automatically be registered in MS-LAP via CuLearn. You have access to online tutorial videos free of charge. For more information and tutorials on how to access MS-LAP, please see: <https://carleton.ca/math/math-learning-assistance-program/>

Policies

Academic Integrity: All tests, assignments, quizzes, and exams are to be done independently. Any instance of suspected cheating or plagiarism will not be tolerated. Suspected cheating will be reported to the Dean, according to the policies stated in General Regulations. For more information, please consult: <http://www.carleton.ca/cu0607uc/regulations/acadregsuniv14.html>

Academic Accommodations: You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy or 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 website <http://www2.carleton.ca/equity/accommodation/>

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at +1613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Accommodation for Student Activities: Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor 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. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

Tentative Course Outline: The weekly coverage might change as it depends on the progress of the class. However, you must keep up with the reading assignments.

Week	Content
Week 1 Jan 7, 9	<ul style="list-style-type: none"> • 4.4 Indeterminate forms and L'Hospital's rule.
Week 2 Jan 14, 16	<ul style="list-style-type: none"> • 5.5 The Substitution Rule. • 7.1 Integration by Rule.
Week 3 Jan 21, 23	<ul style="list-style-type: none"> • 7.2 Trigonometric Integrals. • 7.3 Trigonometric Substitution.
Week 4 Jan 28, 30	<ul style="list-style-type: none"> • 7.4 Integration of Rational Functions by Partial Fractions. • 7.5 Strategy for Integration.
Week 5 Feb 4, 6	<ul style="list-style-type: none"> • 7.8 Improper Integrals. • 10.1 Curves Defined by Parametric Equations.
Week 6 Feb 11, 13	<ul style="list-style-type: none"> • 10.2 Calculus with Parametric Curves. • 10.3 Polar Coordinates.
NA Feb 18, 20	<ul style="list-style-type: none"> • WINTER BREAK WEEK
Week 7 Feb 25, 27	<ul style="list-style-type: none"> • 10.4 Areas and lengths in Polar Coordinates. • 11.1 Infinite Sequences.
Week 8 Mar 3, 5	<ul style="list-style-type: none"> • 11.2 Series.
Week 9 Mar 10, 12	<ul style="list-style-type: none"> • 11.3 The Integral Test and Estimates of Sums. • 11.4 The Comparison Tests.
Week 10 Mar 17, 19	<ul style="list-style-type: none"> • 11.5 Alternating Series. • 11.6 Absolute Convergence and the Ratio and Root Tests.
Week 11 Mar 24, 26	<ul style="list-style-type: none"> • 11.7 Strategy for Testing Series. • 11.8 Power Series.
Week 12 Mar 31 and Apr 2	<ul style="list-style-type: none"> • 11.9 Representation of Functions as Power Series. • 11.10 Taylor and Maclaurin Series
Week 13 Apr 7	<ul style="list-style-type: none"> • Review

Important Dates:

January 7 First class
 January 17 Last day for registration
 January 31 Last day to withdraw from winter term with full fee adjustment
 February 6 Test 1
 February 17 Statutory holiday
 February 17-21 Winter break. Classes are suspended
 March 5 Test 2
 March 13 Exam accommodation request
 March 26 Test 3
 April 7 Last day to withdraw from the course
 April 7 Last day of classes
 April 13-25 Final Exam

For more information please visit

<http://carleton.ca/registrar/registration/dates-and-deadlines/>