



MATH 2007A: ELEMENTARY CALCULUS II

Summer 2020

Instructor:	Dr. Fares Said	Lecture:	Posted weekly; accessible at any time
Email:	fares.said@carleton.ca	Place:	Online via CuLearn
Office:	Zoom, Facetime or other medium	Office Hours:	Online Appointment request by email or call 6138751206 after 4pm

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, 9th edition, by James Stewart, Brooks/Cole. If you have the 8th edition, that will be acceptable as well.*

Lectures: Lecture notes and pre-recorded lectures will be uploaded weekly on cuLearn. The first lecture will be uploaded on May 4, 2020.

Tutorials: Weekly tutorials via BigBlueButton (BBB) will be held on Thursdays from 19:05-19:55. **Tutorials will start on May 11, 2020.** The following table gives more details:

Tutorial	TA name	TA email	Time	Room
A1	Siming Tian	simontian3@email.carleton.ca	Thu 19:05-19:55	BBB1
A2	Emile Greer	EmileGreer@email.carleton.ca	Thu 19:05-19:55	BBB2

Tutorial Tests: There will be **four** 50-minute tests administered following the tutorials from 20:00 to 21:00 on **May 21th, June 11th, July 2nd and July 30th**. 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!** 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.

Tutorial Quizzes: There will be an online quiz administered after each of the tutorials, from 20:00 to 20:15 excluding the days on which you have tests.

Final: The final exam will be an online three-hour closed book exam to be held during the period of August 17-23, 2020 (including Saturdays and Sundays). Please check the link provided on CuLearn to confirm the exact date and time of the final exam as that period approaches. Students who wish to review their final examination 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:

- *Forum Participation (answering questions) (5%)*
- *Quizzes (25%)*
- *Tests (30%)*
- *Final Examination (40%).*

The above grading scheme applies only when the Total tests grade is at least 30/60. A Tests Grade of less than 30/60 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 May 4	<ul style="list-style-type: none"> 4.4 Indeterminate forms and L'Hospital's rule.
Week 2 May 11	<ul style="list-style-type: none"> 5.5 The Substitution Rule. 7.1 Integration by Parts.
Week 3 May 18	<ul style="list-style-type: none"> 7.2 Trigonometric Integrals. 7.3 Trigonometric Substitution.
Week 4 May 25	<ul style="list-style-type: none"> 7.4 Integration of Rational Functions by Partial Fractions. 7.5 Strategy for Integration.
Week 5 June 1	<ul style="list-style-type: none"> 7.8 Improper Integrals. 10.1 Curves Defined by Parametric Equations.
Week 6 June 8	<ul style="list-style-type: none"> 10.2 Calculus with Parametric Curves. 10.3 Polar Coordinates.
NA June 17 to July 1	<ul style="list-style-type: none"> MID SEMESTER BREAK
Week 7 July 6	<ul style="list-style-type: none"> 10.4 Areas and lengths in Polar Coordinates. 11.1 Infinite Sequences.
Week 8 July 13	<ul style="list-style-type: none"> 11.2 Series.
Week 9 July 20	<ul style="list-style-type: none"> 11.3 The Integral Test and Estimates of Sums. 11.4 The Comparison Tests.
Week 10 July 27	<ul style="list-style-type: none"> 11.5 Alternating Series. 11.6 Absolute Convergence and the Ratio and Root Tests.
Week 11 August 3	<ul style="list-style-type: none"> 11.7 Strategy for Testing Series. 11.8 Power Series.
Week 12 August 10	<ul style="list-style-type: none"> 11.9 Representation of Functions as Power Series. 11.10 Taylor and Maclaurin Series

Important Dates:

May 4	First class
May 15	Last day for registration
May 22	Last day to withdraw from summer term with full fee adjustment
May 21	Test 1
June 17 to July 1	Mid semester break
June 11	Test 2
July 02	Test 3
July 24	Exam accommodation request
July 30	Test 4
August 14	Last day to withdraw from the course
August 14	Last day of classes
Aug 17-23	Final Exam Period

For more information please visit

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