

Faculty of Science Course Syllabus**Department of Mathematics***MATH 1290**Engineering Math II**Summer B 2019***Instructor:** Dr. Obaidah Afghani: oafghani@dal.ca 125 Chase Building**Lectures:** MTWRF 11:05 - 11:55 AM Studley KENNETH ROWE MANAG 1009**Office Hours:** Monday, Wednesday and Friday: 1:00 - 2:00 PM**Tutorials:** MTWRF 12:05 - 12:55 PM Studley HENRY HICKS ACADEMIC 217**Course Description**

A continuation of the study of calculus with topics including: Riemann sums, techniques of integration, elementary differential equations and applications, sequences and series, Taylor series parametric equations and polar coordinates. This course also introduces the students to the application of mathematics in engineering problems.

Course Prerequisites

MATH 1280 or an equivalent course covering differential calculus.

Course Objectives/Learning Outcomes

By the end of this course students should be able to use integration to calculate lengths, areas, surface areas and volumes and also use exponential models to solve a wide range of problems. They should be able to solve problems using advanced integration techniques, sequences, series and parametrization of curves.

Course Materials

- Textbook: *Calculus, Early Transcendentals, 2nd Edition* by Briggs, Cochran, and Gillet.
- Website: *MATH 1290 Brightspace webpage.*

Course Assessment

Component	Weight (% of final grade)	Date
<i>Tests: Six Weekly Tests</i>	<i>78%</i>	<i>TBA; last test on August 20</i>
<i>Assignments: Seven homeworks</i>	<i>21%</i>	
<i>Bonus</i>	<i>1%</i>	

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

A+ (90-100)	B+ (77-79)	C+ (65-69)	D	(50-54)
A (85-89)	B (73-76)	C (60-64)	F	(<50)
A- (80-84)	B- (70-72)	C- (55-59)		

Course Policies

1. *Tests are closed book and closed notes.*
2. *On days when there is a test, a review session will be held during the lecture period.*
3. *Only the official Dalhousie University Health Services form will be accepted as an excuse to miss a test.*
4. *Students are expected to work independently on the homework assignments.*
5. *Attendance is necessary for lectures and tutorials.*

Course Content

1. *Applications of Integrals; 2. Integration Techniques, 3. Sequences and Infinite Series; 4. Power Series; 5. Parametric & Polar Curves.*
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University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate. See course outline for more details about:

- **Academic Integrity**
- **Accessibility**
- **Student Code of Conduct**
- **Diversity and Inclusion – Culture of Respect**
- **Recognition of Mi'kmaq Territory**
- **Important Dates** in the Academic Year (including add/drop dates)
- **University Grading Practices**
- **Missed or Late Academic Requirements due to Student Absence (policy)**
- **Student Resources and Support**