## MTH 142-2001, Summer 2019

URI FCCE Providence Campus, Room 213
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## Calculus: Single Variable, 7th edition

Deborah Hughes-Hallett, Andrew Gleason, William McCallum, et al.

ISBN: 1119379334
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## You will need a WileyPLUS access code!

This comes with new textbooks in the bookstore. If you have a code from Math 141, it will still work. You can also buy a code directly from Wiley.


Grade Breakdown

| Wiley Homework | $20 \%$ |
| :---: | :---: |
| Classwork | $25 \%$ |
| Midterm 1 | $12.5 \%$ |
| Midterm 2 | $12.5 \%$ |
| Final (cumulative) | $30 \%$ |

## Grading Scale

| A | A- | B+ | B | B- | C+ | C | C- | D+ | D | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $93-100$ | $90-92.99$ | $87-89.99$ | $83-86.99$ | $80-82.99$ | $77-79.99$ | $73-76.99$ | $70-72.99$ | $67-69.99$ | $60-66.99$ | $\leq$ |

## Introduction

This second course in calculus assumes that you know and can use the basic ideas covered in MTH 141. As in MTH 141, we will approach new ideas and problems from algebraic, graphical, and numerical points of view.

How to succeed in MTH142
Spend about 6 hours a day, outside of class, working on problems, reading the text, and working on other projects.
Sometime during the first week of class, set up your weekly schedule so that specific days and times are reserved for working out math problems

- Buy a notebook where you will write solutions to all the recommended problems.
- Save all quizzes, handouts, and any other work. Use them to prepare yourself for tests.
- Establish a group of fellow students to work with.
- Visit the tutoring office if needed. Visit Sakai for more information about the tutoring schedule.
- Come to class every time! Skipping class, even only a couple of times, will translate into a lower course grade
- If you come to office hours, make sure you bring your work.


## Goals and Objectives

The goals of the course are to have you develop symbol manipulation skills, mathematical modelling skills, skills in the use of technology to treat mathematical problems, an understanding of the language of calculus, and an appreciation for the uses of calculus in the sciences.

At the conclusion of this semester you should be able to:

1. Calculate integrals using a variety of algebraic and numerical techniques.
2. Solve problems in geometry, physics and probability using integrals.
3. Solve first order ordinary differential equations by graphical, numerical and algebraic techniques, and to set up mathematical models for problems in the sciences.
4. Calculate approximations to functions using the concepts of Taylor expansions.
5. Determine properties of convergence of numerical and power series.

## MTH 142 Summer 2019 Calendar and Syllabus

The following calendar gives a time table for the course. At any given time, the class may be behind or ahead. Some of the problems listed may be done in class, others as homework. The instructor will be more specific. Nevertheless, you should work all the problems below.

|  | Week | Sections/Events/Exams | Homework Problems |
| :---: | :---: | :---: | :---: |
| 1 | $\begin{aligned} & \text { June } 24 \\ & \text { \| } \\ & \text { June } 27 \end{aligned}$ | First day of class, Monday July $24^{\text {th }}$ | (7.1). $9,13,19,29,33,39,59,61,63,160,161$. <br> (7.2). $7,11,17,27,31,39,41,43,45,47,85,86$. <br> (7.4). $5,12,15,21,27,31,33,35,47,52,55,61$ <br> (7.5). 7, 11, 13, 22, 24, 29, 31 <br> (7.6). 9, 11, 15, 17, 19, 21, 25, 35, 39 |
| 2 | $\begin{aligned} & \text { July 1st } \\ & \text { July } 5^{\text {th }} \end{aligned}$ | Midterm 1, Wednesday July $3^{\text {rd }}$ <br> Drop Deadline, Fri July 5th <br> Thursday July $4^{\text {th }}$, no class. <br> Friday, July $5^{\text {th }}$, make up class | (7.7). 3, 5, 7, 9, 10, 11, 19, 21, 25, 29, 37 <br> (8.1). 1, 3, 7, 11, 21, 39, 41 <br> (8.2). 1, 3, 13, 17, 23, 29, 31, 33, 35, 37, 51. <br> (8.3). 1, 3, 5, 7, 11, 13, 15, 25, 29, 31, 33, 37 <br> (8.4). 3, 5b, 17, 24, 27, 31 <br> (8.5). 13, 19, 21, 23, 41, 44 |
| 3 | July 8th \| July $11^{\text {th }}$ | Midterm 2, Thursday July $11^{\text {th }}$ | (9.1). 5, 11, 15, 20, 23, 25, 65 <br> (9.2). 1, 3, 5, 13, 15, 21, 23, 25, 29, 35, 64, 65 <br> (9.3). 3, 7, 11, 17, 27, 31, 49, 50 <br> (9.4). 11, 13, 17, 21, 25, 29, 41, 46, 75, 79, 81, 87, 89, 123 <br> (9.5). 9,15, 21, 23, 25, 30, 37 |
| 4 | $\begin{gathered} \text { July } 15 \\ \text { \| } \\ \text { July } 18 \end{gathered}$ |  | (10.1). 3, 5, 13, 21, 39,45 (10.2). $1,2,7,15,21,23,29,31,47,49,61,65$ (10.3). $5,9,15,25,41,41,61,63$ (10.4). (11.1). $9,11,13,25$ (11.2). 1, 11, 21, 25 |
| 5 | $\begin{aligned} & \text { July } 22 \\ & \text { । } \\ & \text { July } 25 \end{aligned}$ | Cumulative Final, Thurs July 25th | $\begin{aligned} & \text { (11.3). 1, 5, 17 } \\ & \text { (11.4). 1,7, 13, 21, 23, } 29 \\ & \text { (Review.) } \end{aligned}$ |

## Various Topics Related to this Course, Worth Reviewing:

- Completing the Square
http://www.math.uri.edu/~mcomerford/math142/Fall2014/CompletingtheSquare.mp4
- Polynomial Long Division
http://www.math.uri.edu/~mcomerford/math142/Spring2015/PolynomialLongDivision.mp 4
- http://math.uri.edu/~billk/Math142/media/PolarGraphing.mp4

Refer to these online mini courses prepared by our friends, Dr. Christopher Stanizewski and Dr. Bill Kinnersley.

## WileyPlus

WileyPLUS is an online homework system that will be used for some of the homework assignments in this course. A WileyPLUS registration code is required as a part of this course. Assignments are due weekly. You will have the opportunity to work on them as we cover any related materials in class. You should not be in the habit of working on these assignments the day before the listed due date. For this reason, there will be absolutely no extensions of WileyPlus due dates for any reason. Go to www.WileyPlus.com and enter the course ID (TBA)

## Accommodations (DSS)

Any student with a documented need should contact their instructor early in the semester so that we may work out reasonable accommodations to support your success in this course. Students should also contact Disability Services for Students: Office of Student Life, 330 Memorial Union, 874-2098. They will determine with you what accommodations are appropriate and recommend them to us. All information and documentation is confidential. Students requiring special accommodations for exams must notify the instructor at least one week in advance and must provide documentation from the Disability Services Office described above.

## Exam Policies

## Exams

The two midterms and final will consist of only open response questions.

## General Policies

The following policies apply to all exams, and no exceptions will be made.

- You must have a URI Photo ID with you to take an exam.
- URI Academic Integrity rules are enforced (Ref. Student Handbook).
- No books, bags, papers, extra scrap paper, or anything else may be taken with you to your seat. If you bring any of these items with you, you must leave them at the front of the room.
- No calculators of any kind are permitted on exams.
- No cellphones, MP3 players, or any electronic devices of any kind may be used or even accessible to you at any time during the exam.
- Any student found with any cell phone or electronic device for ANY REASON during an exam is cheating.
- You may not leave the room during the exam. Remember to use the bathroom before the exam. If you leave the room for any reason, your exam will be collected.

You are advised to bring multiple pencils to the exams, just in case. Do NOT use a pen.

## Makeup Exam Policies

Makeup exams may be scheduled in the event you are unable to attend the evening exams under the following conditions. Note in particular that if you must miss the exam because of an approved scheduling conflict, you must notify your instructor before, not after, the exam, and emergencies require you to contact your instructor within $\mathbf{2 4}$ hours.

- If your reason for missing the exam as scheduled is (i) a University sanctioned event for which verifiable documentation can be provided (including another scheduled class), or (ii) a responsibility to an employer that cannot be rescheduled (with documentation from your employer), then you MUST INFORM YOUR INSTRUCTOR 48 HOURS IN ADVANCE OF THE EXAM AND PROVIDE DOCUMENTATION. Such events are scheduled in advance, so you must provide advanced notice to your instructor in order to have a makeup exam. Failure to provide this advanced notice will result in a grade of 0 for the exam. No exceptions. Makeup exams must be scheduled after the actual exam, and preferably before the class period when exams are to be handed back, but no later than two business days (excluding weekends and holidays) after the actual exam.
- If the reason for missing the exam as scheduled is due to (i) illness (with verifiable documentation from a medical provider), or (ii) an emergency (with appropriate documentation), then you MUST INFORM YOUR INSTRUCTOR WITHIN 24 HOURS OF THE EXAM and provide documentation upon your return. Failure to notify your instructor within 24 hours will result in a 0 for the exam. No exceptions. Makeup exams may be scheduled no later than two business days (excluding weekends and holidays) after the actual exam, unless the illness or emergency precludes this, in which case the makeup exam will be given on a common date during the last few weeks of the semester or during final exams.

If your circumstances do not meet either of the above (no documentation, a non-emergency excuse without sufficient notice, etc.), then you will receive a zero for the missed exam. No exceptions.

