# MTH 142 – Summer 2025 Syllabus

### Instructor:

Mark Comerford <u>mark\_comerford@uri.edu</u> Office Hours M, W 2-4 online on Zoom. Password for Zoom sessions is always Puppies.

# TAs

TBD

# 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.

# **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 session 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.
- 6. Treat problems involving modeling, algebraic calculations and numerical calculations by using technology (Mathematica, graphing calculators).

**Textbook:** Calculus: Single Variable, by Hughes-Hallett et al, 7th ed., Wiley.

Calculator: Not required, and not allowed in tests

**Prerequisite:** MTH141 with C- or permission of instructor.

### Exams:

Exam 1	Thursday, May 29 – 1.25 hours
Exam 2	Tuesday, June 10 – 1.25 hours
Final Exam	Friday June 20 – 2 hours

## **Evaluation:**

2 Exams	150 points each
Final Exam	250 points
Edfinity HW	200 points
Total	750 points

Use the table above to find your percentage grade (e.g. 630/700 is 90%). Letter grades will be distributed based on the following scale:

Letter Grade	Percentage Grade
A	93.00-100.00
A-	90.00-92.99
B+	87.00-89.99
В	83.00-86.99
В-	80.00-82.99
C+	77.00-79.99
С	73.00-76.99
C-	70.00-72.99
D+	67.00-69.99
D	60.00-66.99
F	59.99 and lower

**Exams:** Exams will be administered online via Brightspace as timed assignments. For the regular exams in Weeks 3,4, you will have 1.25hrs plus and an extra five minutes to scan your work. For the final on June 20, you will have two hours plus an extra ten minutes to scan. Acceptable forms of submitted work are scanned handwritten work (we recommend the Genius Scan app) or handwritten work done on a tablet using a writing app such as Notability or Good Notes. Please note that typed work is not considered an acceptable form of submission!

**Special Needs:** Any student with a documented disability is welcome to contact the instructor as early in the semester as possible so that reasonable accommodations may be arraigned (contact Disability Services for Students Office at 330 Memorial Union 401-874-2098)

**How to Succeed in this Course:** We suggest the following guidelines to help you give yourself the best chance to do well in this course.

- 1. Stay on top of things and don't let the work pile up.
- 2. Try to do some work for the course every day, especially when it comes to the online homeworks with Edfinity.
- 3. Watch the video mini-lectures (each of these is about 15 min long) either before or after reading the notes for each section.
- 4. Don't be afraid to ask for help either from the instructor, the TAs, or from the AEC (see below).
- 5. If you are planning to ask for help with a course problem, you will get much more benefit from the help if you attempt the problem first yourself. This is the case, even if you feel that you have no idea of how to tackle a problem yourself.

**Getting started with Edfinity:** Edfinity will be used for your homework assignments. If you took MTH 141 at URI last semester you will already have an account, but you will need to pay the license fee of \$29 again for this course. The due dates for the Edfinity assignments are based on the course calendar and you will typically have two (business) days between covering the relevant material at the time indicated in the calendar and the assignment being due. Due dates for Edfinity assignments are firm; however you may submit late Edfinity homework with a 10% penalty for work which is less (or equal to) than a week late and a 20% penalty for work which is more than a week late. Details of how to sign in to Edfinity and start an account may be found in the Start Here part of the Brightspace site.

**Tutoring help:** We will have online office hours Mon -Thur from 2-4pm via Zoom. In addition there is online tutoring available at the AEC (Academic Enhancement Center). Details can be found at <u>https://web.uri.edu/aec/tutoring/summer/</u>

**Incomplete Grade:** URI regulations concerning incomplete grades will be followed to the letter. See sections 8.53.20 and 8.53.21 of the university manual.

**Academic Honesty:** Cheating is defined in the University Manual section 8.27.10 as *the claiming of credit for work not done independently without giving credit for aid received, or any unauthorized communication during examinations* (of course, this includes use of the "internet"). Students are expected to be honest in all academic work. The resolution of any charge of cheating or plagiarism will follow the guidelines set forth in the University Manual8.27.10 - 8.27.20.

**Standards of Behaviour**: Students are responsible for being familiar with and adhering to the published "Community Standards of Behavior: University Policies and Regulations" which can be accessed in the University Student Handbook. Behaviour (in our case online

behaviour) that persistently or grossly interferes with classroom activities is considered disruptive behaviour and may be subject to disciplinary action. Such behaviour inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behaviour may be required to leave class pending discussion and resolution of the problem and may be reported to the Office of Student Judicial Affairs for disciplinary action.

**Religious holidays:** It is the policy of the University of Rhode Island to accord students, on an individual basis, the opportunity to observe their traditional religious holidays. Students desiring to observe a holiday of special importance must provide written notification to each instructor according to the procedure set forth in Sections 8.51.11 & 8.51.12 of the University Manual (http://www.uri.edu/facsen/8.50-8.57.html)

#### **Expectations:**

1. You are expected to submit your work on time. If you are unable to hand in your work on time and do not have a valid reason, there will be a 10% penalty for work that is less than one week late and a 20% penalty for work that is later than one week.

2. It is your responsibility to communicate clearly in writing up solutions for homework, quizzes, and exams. Your results must display your understanding well and be written in a correct, complete, coherent, and well organized fashion. The rules of language still apply in mathematics, and they apply even when symbols are used in formulas, equations, etc. Precise communication and neatness count!

3. The rapid pace of the class requires that you spend time every day doing homework, reviewing notes, reading the textbook, and working out extra problems, all in addition to the time spent in class.

**Exam Makeup Policy:** Makeup exams may be scheduled in the event you are unable to attend the evening exams under the following conditions. In particular, if you must miss the exam because of a scheduling conflict, you must notify your instructor before, not after, the exam, and emergencies require you to contact your instructor within 24 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 IF REQUESTED. Makeup exams will be scheduled after the actual exam, and preferably before the class period when exams are to be handed back, but no later than one week after the original date.

•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 a week after the original date, unless the illness or emergency precludes this, in which case the makeup exam will be given on a common date during the last two weeks of the semester.

**Late Work Policy:** Late work in WileyPlus will have a 20% penalty, and must be submitted before the last day of class.