Course Syllabus
Math 141: Calculus I, Summer 2018 (Session 2)

Instructor: Eric Peterson
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Office Hours: MW 12:30-1:30pm, TuTh 9:00-10:00am

Sakai: https://sakai.uri.edu/
The Sakai site for this course will contain lecture notes, grades, administrative announcements, and other important resources (such as quiz solutions). Check it often!

Course Content: The language of science is mathematics, and calculus is an indispensable part of everyday calculations used in science, technology, engineering, mathematics, and other fields. MTH 141 is the first calculus course for students in these areas. This course will make precise and deepen your understanding of fundamental concepts such as change, limit, and rate. You will apply differential calculus to problems in the physical and biological sciences involving optimization, motion, and growth. You will also receive an introduction to integral calculus, which will be further developed in subsequent courses. At the end of the semester you will be able to calculate with and apply differential calculus concepts and methods, including limits, continuity, derivatives, optimization, integration as a limit of sums, and the Fundamental Theorem of Calculus.

Classroom Conduct: The classroom is a place for learning. While you are in class, I expect you to remain focused on the course material, and also to maintain an environment in which other students can do the same. In particular:

- Laptops and tablets can be useful for taking notes or for annotating electronic copies of the provided lecture notes. However, they can also be major distractions. Avoid the temptation to screw around on the internet during class! This is distracting not only to you, but also to other students sitting nearby.
- Cell phones should be muted at all times during class.
- All in-class discussion should pertain to the course material. Asking your neighbor about the derivative of an inverse trig function is fine; asking them about Friday night’s frat party is not. Off-topic chatter can be distracting to other students.
- The point is: be respectful of your fellow students.

Textbook: The textbook for this course is Calculus: Single Variable, 7th Ed. by Hughes-Hallett, McCallum, Gleason, Connally, and Flath. (ISBN: 0470888644) It is NOT required to purchase the textbook!! You will receive an e-book with the purchase of the required WileyPLUS access code
This course will be using WileyPlus for the homework assignments. You will need to purchase an access code, which you can get directly from [http://wileyplus.com](http://wileyplus.com). You may purchase a hard copy of the textbook if you wish, but be warned that a used copy of the book will not come with the required access code.

**Calculator Policy:** No calculators! You may not use calculators on any quiz or exam, nor should you need to. (I will be very forgiving of any arithmetic mistakes.)

**Evaluation:** The course grade will be based on daily classwork, weekly homework, quizzes, three midterm exams, and a final exam.

- Online Homework: 12.5%
- Classwork: 12.5%
- Quizzes: 12.5%
- Midterm Exams: 12.5% each (37.5% total)
- Final Exam: 25%

Scores will be posted in the Sakai gradebook.

The scale for letter grades will be:

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<th>A: 93.00% and above</th>
<th>A-: 90.00% - 92.99%</th>
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<tr>
<td>B+:</td>
<td>87.00% - 89.99%</td>
<td>B: 83.00% - 86.99%</td>
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<tr>
<td>C+:</td>
<td>77.00% - 79.99%</td>
<td>C: 73.00% - 76.99%</td>
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<tr>
<td>D+:</td>
<td>67.00% - 69.99%</td>
<td>D: 60.00% - 66.99%</td>
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<td></td>
<td>F: 59.99% and below</td>
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If you have any questions about the grading of a particular assignment, please let me know.

**Homework:** There will be regular homework assignments in WileyPlus; the URL for our section's WileyPlus page is [www.wileyplus.com/class/649835](http://www.wileyplus.com/class/649835) and the course code is “649835”. The deadlines for these assignments are very generous. Don’t wait until the deadline! It’s to your benefit to complete the assignments promptly. Working through the homework will reinforce your understanding of the material, which will make it easier to follow subsequent lectures. If for some reason you cannot finish the homework on time, late homework will be accepted at a 50% penalty through the end of the semester.

**Classwork:** There will be semi-daily classwork assignments that will often be collected and graded. These will be based on the material given during lecture on that particular day of class. You are encouraged (but not required) to work in groups on these assignments, as collaboration is a great way to learn and is required in nearly all fields of the workforce. Solutions will be provided on Sakai after each graded assignment is returned.
Quizzes: There will be weekly quizzes given to test your knowledge of the material and help prepare you for the midterm exams. Each quiz and the material covered will be announced in advance. Quizzes may be either take-home or given in class, and solutions will be provided on Sakai after each graded quiz is returned.

Midterm Exams: There will be three midterm exams given throughout the summer session (the following dates are all tentative):

- Exam #1: Tuesday, July 3rd
- Exam #2: Wednesday, July 11th
- Exam #3: Thursday, July 19th

Each midterm will be part multiple-choice and part free-response. You will have 90 minutes (1 hour 30 minutes) to complete each midterm exam, which will be given during the second half of the class period they are scheduled for.

Final Exam: There will be a cumulative final exam given on our last day of class for the summer session, which is Thursday, July 26th (from 10:00am - 12:30pm). As with the midterm exams, the final exam will be part multiple-choice and part free-response.

Attendance Policy: I will be keeping attendance and fully expect you to attend every single class. We will be covering a sizeable amount of new material each day and you WILL fall behind if you miss class. In addition, failure to attend class will result in missing graded classwork assignments and quizzes. Be warned: there will be no makeup quizzes, assignments, or exams given, except under extraordinary circumstances at the discretion of the instructor.

Academic Accommodations: If you require academic accommodations and have documentation from Disability Services (874-2098), please get in touch with me as soon as possible.

Academic Integrity: Cheating is prohibited in all aspects of the course and will result in severe consequences. Cheating includes but is not limited to: communication with other students during a quiz or exam, reading another student’s written work during a quiz or exam, and use of any electronic device (including calculators) during a quiz or exam.

General Education Areas: MTH 141 satisfies the General Education requirements below:

- B3 - Mathematical, Statistical, or Computational Strategies (Mathematics): Apply the appropriate mathematical, statistical, or computational strategies to problem solving.
Office Hours / Email: I will remind you over the course of the next few weeks to utilize my office hours and email to the fullest of your advantage! My goal is to help you understand calculus to the best of my ability. I am very welcoming of any questions you may have over email or in-person and will do my best to answer them. If you feel you are struggling in this course, please contact me sooner rather than later!

Course Goals: The primary aim of Math 141 is to:

- Provide an introduction to one-variable calculus, which is essential to natural and mathematical sciences, engineering, and other areas.
- Expose students to mathematical concepts and provide mathematical skills needed in their area of specialization.
- Provide a bridge for the student from high-school or lower-division mathematics courses to upper-division mathematics.
- Help students to become effective mathematics problem solvers, specifically help them to:
  1. Understand concepts rather than merely mimic techniques.
  2. Demonstrate understanding through explanation.
  3. Understand the relationship between a process and its corresponding inverse process.
  4. Select between formal and approximate methods for solution of a problem, and make judgments about the appropriateness of the choice.
  5. Select the proper mathematical tool or tools for the task at hand.

Math 141 Learning Outcomes: At the end of the course, the student should be able to demonstrate knowledge and application of the following:

1. Limits and Continuity
2. Derivatives
3. Computing Derivatives Algebraically:
4. Using Derivatives
5. Integration
6. Modeling, Approximation, and Technology
7. Written Mathematical Communication