

SYLLABUS: MATH 182, Honors Calculus 2

Professor: John Bardsley

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Time and Place: MTWRF 11:10am-noon, Math 211.

Text: *Single Variable Calculus*, 6th edition, Stewart.

Sections: Roughly, Chapters 6, 8, 9, 12, 11, 10.

Prerequisites: Math 181 or consent of instructor.

Course Web Page: <http://web.math.umt.edu/bardsley/courses/182/182.html>

Office Hours: My official hours are Monday, Wednesday, and Friday 2-3pm, but you can stop by any time. I'll let you know if I'm too busy to meet.

LEARNING GOALS: By the end of the course you should:

1. Understand the relationship between differential and integral calculus (Fundamental Theorem of Calculus).
2. Understand some of the applications of integration, including area, volume, arc length, etc. This includes the ability to set up definite integrals as solutions to common application problems.
3. Be able to calculate antiderivatives using techniques such as integration by parts and trigonometric substitutions.
4. Have some familiarity with first-order differential equations.
5. Have a basic understanding of curves defined by parametric or polar equations.
6. Be able to test infinite series for convergence, and to find the interval of convergence of a power series.
7. Be able to find the Taylor series of a function.

ASSESSMENT: Your course grade will be determined as follows:

		Total points
Exam 1	E1	100
Exam 2	E2	100
Exam 3	E3	100
Final	F	200
Quizzes	Q	100

$$\text{percent} = (E1+E2+E3+F+Q)/6.$$

Quizzes: The quizzes will be worth 10 points a piece and will be given once a week. *One* quiz score will be dropped. The quiz problems will be *very* similar to those assigned in the homework. *There will be no makeup quizzes, though quizzes may be taken in advance if arrangements are made.*

Homework: Homework will be given daily and solutions will be posted on the course web-page. Your performance on the homework will not count towards your final grade, though you will be quizzed each week on the content of the homework.

How to be successful: Do the homework every day. When preparing for exams and quizzes, practice doing the homework and similar problems from the book until you are able to do them correctly without the aid of the book or notes. If you don't understand something, ask questions in class or during office hours immediately.

STUDENT CONDUCT: All students need to be familiar with the Student Conduct Code. You can find it in the "A to Z Index" on the UM home page. All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

FOR ANY STUDENT WITH A DISABILITY: If you have a disability that has, or might have, an effect on your performance in this class, please let me know. I will do my best to accommodate you.

Calculator/Computer Information: A graphing calculator is recommended for this course, though only basic calculators functions will be used.

Final Note: Announcements made in class are considered addenda to this syllabus. Mid-term exam dates are tentative, make sure you stay informed as to the progress of the class.

Important Dates:

February 12:	Last day to drop/add via Cyberbear, submit override, change to audit.
April 5:	Last day to drop classes/change sections
after April 5:	Petition drops only
April 15-17:	attend National Collegiate Undergraduate Research Conference.
Final Exam:	10:10am-12:10pm, Tuesday, May 11.