

MATH 236, Calculus II

pulcher et utilis

Course Description: This is a second university course in calculus, intended for students hoping to advance in mathematics proper, or to apply calculus to problems in other disciplines, including: physics, chemistry, biology, geology, engineering, computer science, and quantitative social science. The course begins with integration and differentiation of transcendental functions. This is followed by expanded techniques of integration, and a preliminary study of simple equations relating functions and their derivatives. The elegant theory representing functions via Taylor and Maclaurin series will be pursued concurrently with the preceding topics, with a unification of sorts reached at the end of term.

Prerequisite: Grade of C or better in Math 235, or equivalent.

Text: *Calculus, JMU edition*, by H. Anton, Wiley Custom Services.

Class Meetings:

Section III: MWF 1:25-2:15 in Burruss 32 and Th 2-3:15 in Burruss 33.

Section IV: MWF 2:30-3:20 in Burruss 32 and Th 3:30-4:45 in Burruss 33.

Professor: E. Θ Brown, PhD., brownet@math.jmu.edu.

Office Hours: M 8:30-9AM, W 8:30-9AM, Th 5-6:15PM, F 8:30-9AM and 3:30-4:30PM, as well as by appointment.

Science and Math Learning Center: The SMLC, located in 200 Roop Hall, offers free tutorial assistance for Math 236. Please consult the center's web site, <http://www.jmu.edu/smrc/>, for hours of operation.

Course Web Site: Various useful information, including a copy of this syllabus, is collected on the course web site, <http://www.math.jmu.edu/~brownet/236/>

Shenandoah Undergraduate Mathematics and Statistics (SUMS) Conference: Every student is required to attend, and encouraged to give a poster at, the SUMS conference, which will be held at JMU on October 3 (a Saturday). Information and registration is on the conference web site, <http://www.math.jmu.edu/SUMS>

Exams: Mid-term examinations will be held during class on September 18, October 16, and November 20. The final for Section 3 will be Wednesday December 9 from 10:30am-12:30pm. The final for Section 4 will be Monday December 7 from 1pm-3pm. There will be no make-up exams, except in cases of what I construe to be documented emergencies.

Homework: Homework assignments will be given in class and posted on the assignments page of the course web site. Homework should be thoroughly attempted before the following class; unless something else is stipulated at time of assignment, written homework is due at the start of class, two class periods after it is assigned. Late homework will not be accepted.

Grading: Course grades will be computed based on students' total scores. These will be computed via home-and class- work: 15%, mid-terms: 20% each, final exam: 25%.

Honor Code: Students are expected to observe the JMU academic conduct code. Violation of the honor code is in essence theft from other students, and will be treated with corresponding gravity. In this course, collaboration on homework is encouraged; copying is forbidden. All work on exams must be individual.

Special Circumstances: Any student who requires special arrangements because of a physical, mental, psychiatric or religious condition should speak with me during the first week of class. Our conversation will be confidential, except for communication I need to have with Student Services. Please also see me if relevant new circumstances arise during the term.