

MATH 1810
APPLIED CALCULUS I
3 Credit Hours

Instructor:

Office:

Phone:

Email:

Office Hours:

Prerequisites:	Eligibility to take Math 1710 -- DSPM 0850 or two years of high school algebra; a Math Enhanced ACT 19 or greater or COMPASS placement.
Text:	<i>Calculus for Business, Economics, the Social & Life Sciences</i> , 10 th edition, Hoffman & Bradley
Technology:	TI-83 or TI-84+ suggested. TI-89 or equivalent not allowed

Math 1810 - Applied Calculus I

Purpose:	This course is designed to help students develop basic skills and concepts in applied calculus. It introduces the notion of the limit of a function and applies the idea to a definition of the derivative and integral.
Learning Objectives:	Upon completion of this course, students will 1. Have a clear understanding of functions. 2. Have the ability to calculate the derivative of a function utilizing its definition, Formulas derived from the definition of the derivative, and previously known derivatives of component functions. 3. Have the ability to apply derivatives to the approximation of function values, to sketching (including increasing-decreasing behavior, optimization, concavity and inflection points) and to solving problems modeled by functions. 4. Have a clear understanding of the definite integral-its definition, calculation and application using Anti-derivatives and the Fundamental Theorem of Calculus..
Topical Outline:	This course consists of selected topics from Chapters 1, 2, 3, 4, and 5. Sections to be covered include: Chapter 1 – Functions, Graphs and Limits: Sections 1—6 Chapter 2 – Differentiation: Basic Concepts: Sections 1—6 Chapter 3 – Additional Applications of the Derivative: Sections 1,2,4,5 Chapter 4 – Exponential and Logarithmic Functions: Sections 1—4 Chapter 5 – Integration: Sections 1—6

Evaluation:

Grading Scale:

100-90% ---A

89-80% ---B

79-70% ---C

69-60% ---D

Below 60% ---F

Drop/Withdrawal Policy (Note to instructor: underlined dates will need updating for each semester)

Please note the Drop Policy and Withdrawal Procedures as they are stated in the Registration Guide. The last day to drop this course without a grade is September 10. The last day to drop this course with a "W" is October 15. A grade of "I" will be given only in accordance with University Policy.

No grade of "W" will be assigned after the official drop date except in situations involving extreme extenuating circumstances beyond the student's control. In particular, a "W" will not be granted merely because the student is failing. Students should be aware that missing the official drop date and thereby receiving an "F" can have ramifications on financial aid.

Lottery Scholarships

To retain Tennessee Education Lottery Scholarship eligibility, you must earn a cumulative TELS GPA of 2.75 after 24 and 48 attempted hours and a **cumulative** TELS GPA of 3.0 thereafter. You may qualify

with a 2.75 **cumulative** GPA after 72 attempted hours (and subsequent semesters), if you are enrolled full-time and maintain a **semester** GPA of at least 3.0. A grade of C, D, F, or I in this class may negatively impact TELS eligibility. Dropping a class after 14 days may also impact eligibility; if you withdraw from this class and it results in an enrollment status of less than full time, you may lose eligibility for your lottery scholarship. Lottery recipients are eligible to receive the scholarship for a maximum of five years from the date of initial enrollment, or until a bachelor degree is earned. For additional Lottery rules, please refer to your Lottery Statement of Understanding form, review lottery requirements on the web at <http://scholarships.web.mtsu.edu/telsconteligibility.htm>, or contact the Financial Aid Office at 898-2830.

Disability Assistance

If you have a disability that may require assistance or accommodation, or you have questions related to any accommodations for testing, note takers, readers, etc., speak with me as soon as possible. Students must also contact the Office of Disabled Students Services (898-2783) with questions about scheduling such services.