



CAMPBELLVILLE UNIVERSITY

COURSE SYLLABUS

PLEASE TYPE.

DATE 8/29/07

ACADEMIC UNIT Math/CS

FACULTY Chris Bullock

Discipline	Course# Section	Title of Course	Credit Hours	Cross Reference (if applicable)
Math	MTH 210-01	Calculus I	4	

TEXTBOOK Required Not Required

Author Stewart

Title Calculus 8th ed.

Publisher Cengage

Date of Publication 2016

WORKBOOK

Author _____

Title _____

Publisher _____

Date of Publication _____

PLEASE ANSWER THE FOLLOWING QUESTIONS ON A SEPARATE SHEET OF PAPER AND ATTACH TO THIS FORM.

1. DESCRIPTION OF COURSE: Develop a brief description of the course as it will appear in the Catalog.
2. COURSE OBJECTIVES: List the objectives of the course, both general and specific. Please relate these objectives to the mission and goals of the University and the Academic Unit.
3. COURSE OUTLINE: Outline the topics/units that are to be taught.
4. EVALUATION: How do you plan to determine the grade in the course. Please include grading scale.
5. REQUIREMENTS
 - a. Examinations: State when tests are to be administered, including unit, mid-term, and final examinations.
 - b. Reports: How many, length required, and what type (Oral, term and/or research, book critiques).
 - c. Supplemental reading assignments or outside work required.
 - d. Supplemental instruction aids: Audio visual aids, field trips, guest speakers, etc.
6. BOOKLIST

DEAN *Michael R. Page*

Date Copy Received 8/30/2016

VICE PRESIDENT FOR ACADEMIC AFFAIRS

Date Copy Received _____

Campbellsville University

MTH 210-01

Calculus I

MEETING PLACE: CH 404
MEETING TIMES: MWF 9-9:50 and T 9:30-10:20
TEXTBOOK: Calculus 8th ed. by Stewart

INSTRUCTOR: Chris Bullock
OFFICE: CH 314
OFFICE PHONE: 789-5243
E-MAIL: ctbullock@campbellsville.edu
OFFICE HOURS: MWF 12-1 and 2-3
TR 2-3:15
or by appointment

1. DESCRIPTION OF COURSE: The important topics studied are the historical beginnings of the Calculus, analytic geometry, limits, derivatives with applications, the definite and indefinite integrals with applications. A grade of “C” or better is required to advance to MTH 211. Prerequisite: MTH 112 or consent of instructor.
2. COURSE OBJECTIVES: Students in this course are expected to obtain a working knowledge of modern calculus. In particular, students are expected to understand the concepts of limits, derivatives, and integrals and to be able to apply these concepts to real-life situations to solve problems. Students in this course should gain confidence and experience in mathematics. Also, students should gain an understanding of the usefulness of calculus of single-variable functions in many areas of life. Topics to be covered include limits and their properties, differentiation, applications of differentiation, and integration.
3. STUDENT GENERAL EDUCATION LEARNING OUTCOMES: In the Math/CS Department, we wish for all students taking general education courses in mathematics to demonstrate an adequate level of ability at the postsecondary level in the following areas as denoted by the following student learning outcomes.
 1. The student will demonstrate the ability to think logically and critically.
 2. The student will be able to communicate mathematics in oral or written form.
 3. The student will demonstrate quantitative literacy by interpreting, planning, and solving real world problems.
 4. The student will demonstrate knowledge of the role of ethics in mathematical pursuits.
4. COURSE OUTLINE:
 - Section 1.2: Catalog of Essential Functions
 - Section 1.3: New Functions from Old Functions

Section 1.4: The Tangent and Velocity Problems
Section 1.5: The Limit of a Function
Section 1.6: Calculating Limits Using the Limit Laws
Section 1.8: Continuity
Section 2.1: Derivatives and Rates of Change
Section 2.2: The Derivative as a Function
Section 2.3: Differentiation Formulas
Section 2.4: Derivatives of Trigonometric Functions
Section 2.5: The Chain Rule
Section 2.6: Implicit Differentiation
Section 2.7: Rates of Change in Science
Section 2.8: Related Rates
Section 2.9: Linear Approximations and Differentials
Section 3.1: Maximum and Minimum Values
Section 3.2: The Mean Value Theorem
Section 3.3: Derivatives and the Shape of a Graph
Section 3.4: Limits at Infinity; Horizontal Asymptotes
Section 3.5: Curve Sketching
Section 3.7: Optimization Problems
Section 3.8: Newton's Method
Section 3.9: Antiderivatives
Section 4.1: Area under a Curve
Section 4.2: The Definite Integral
Section 4.3: The Fundamental Theorem of Calculus
Section 4.5: The Substitution Rule

Note: Topics may be added or omitted depending upon time constraints.

5. EVALUATION: There will be a total of four tests including a final exam. Each test will be worth 100 points. Also, there will be a homework grade worth 100 points. Thus, there will be a total of 500 attainable points in this class. The grading scale will be as follows:

90-100% A
80-89% B
70-79% C
60-69% D
0-59% F

Homework will be assigned and graded after almost every class meeting. Each homework assignment will consist of a variable number of questions. Each homework problem will be graded as follows: 2 points for a correct solution, 1 point for a partially correct solution, 0 points for no effort or a completely incorrect solution. The percentage of earned points out of the total points will be recorded for each assignment. At the end of the semester, these homework grades will be averaged to get the final 100-point

homework grade. This grade will then be averaged with the four test grades to obtain the final grade for the class.

6. REQUIREMENTS: The tentative dates for the exams are as follows:

Exam #1: Sep 27

Exam #2: Oct 18

Exam #3: Nov 15

Final: Dec 14 from 8-9:30

7. ATTENDANCE: Campbellsville University has an attendance policy which states that a student who misses two weeks worth of a class (for any reason) receives a warning. Thus, any student missing 8 class periods in this class will receive a warning. Any student who misses four weeks worth of a class (for any reason) is automatically withdrawn from the class with a failing grade. Thus, any student missing 16 class periods in this class will be withdrawn from the class. PLEASE NOTE THAT, BY THIS POLICY, ANY ABSENCE COUNTS, WHETHER EXCUSED OR UNEXCUSED.

Attendance will be recorded by me every class period at the beginning of class. If you are late for class, you will be counted as absent. Also, if you leave class early, leave your seat, disrupt class, or distract anyone else in class by talking, you will be counted absent. The actions above show disrespect for others in class and thus will be penalized as noted.

You must notify me in advance if you are going to miss a test. You may contact me by phone or by e-mail. Make-up exams are possible if I am notified in advance and if I think the excuse is reasonable.

8. CALCULATORS: Only scientific calculators will be permitted for use on exams. Graphing calculators, cell phones, and other forms of technology are strictly prohibited. It is your responsibility to make sure that you have an acceptable scientific calculator for each exam. Calculators may not be shared under any circumstances.

2. 9. ADDITIONAL SOURCES:

Calculus 12th ed. by Thomas

Calculus: Early Transcendentals by Briggs and Cochran

10. DISABILITIES: Disability Statement: Campbellsville University is committed to reasonable accommodations for students who have documented learning and physical disabilities, as well as medical and emotional conditions. If you have a documented disability or condition of this nature, you may be eligible for disability services. Documentation must be from a licensed professional and current in terms of assessment. Please contact the Director of Disability Services at (270) 789-5450 to inquire about services.

11. SECURITY: Campus Security: Cell Phone: (270) 403-3611; Office: (270) 789-5556

12. TITLE IX STATEMENT: Campbellsville University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment and to comply with Title IX of the Education Amendments of 1972 and guidance from the Office for Civil Rights, the University requires all responsible employees, which includes faculty members, to report incidents of sexual misconduct shared by students to the University's Title IX Coordinator.

3. Title IX Coordinator:
4. Terry VanMeter
5. 1 University Drive
6. UPO Box 944
7. Administration Office 8A
8. Phone – 270-789-5016
9. Email – twvanmeter@campbellsville.edu

Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at: www.campbellsville.edu/titleIX