

Math 172 Calculus I, Winter 2017

Instructor: Thad O'Dell

Final Exam: Thursday, March 16th 8 am

Office: Black 225-35

Office Phone: 963-2602

e-mail: odellt@cwu.edu (preferred)

office hours: M – Th 11:00 to 12:00

A graphing Calculator is required for this class. I will be using a TI-84, which is very similar to the TI-83.

The required Textbook is “Calculus; Single variable 3rd ed.” By Rogawski,

Goal of this course: This course is an introduction to differential calculus. A break down of the concepts covered follows: Concepts of limits, continuity. the definition of derivative (using limits), interpreting what a derivative means; slope, concavity, velocity, rate of change, etc. Relating graphs of the function and it's derivative. Basic derivatives, the Power rule, derivative of trig functions, log functions and exponential functions. The product, quotient, and chain rules. Equation of a tangent line, and tangent line approximations, implicit differentiation. Derivative of inverse functions, Inverse trig functions, Logarithmic functions. Evaluating derivatives at a points with application. 1st derivative test 2nd derivative test, Review of algebra concepts for graphing a curve, Curve sketching, optimization problems, Related rates, L'hospital's Rule.

You also will develop perseverance in solving problems that initially do not just roll over and cower before your superior intellect. ☺

Grades

Grades will be calculated based on the following percentages:

Three midterm Exams: 300 pts

Various quizzes: 70 pts

Weekly Homework: 100 pts

Final comprehensive Exam: 200 pts

Exams: Make-up exams for the midterms will be at my discretion, and must be requested before or in extreme emergencies within 24 hours after the exam. They will only be given if you have evidence of a legitimate reason for missing the exam. The **tentative** dates of the three exams are: Exam 1; Oct 6th, Exam 2; Oct 28th, Exam 3; Nov 22

Quizzes: Quizzes will be given on a regular basis with or without advanced warning. **No makeup quizzes will be given.** However, I will drop your lowest quiz score. Some quizzes will be in class and others will be take home. Quiz dates will be posted on Canvas.

Homework: There will be three types of homework for this class. The first type consists of problems from the book. There is a list of them on canvas. These book problems will not be handed in or graded.

There also will be Worksheets handed out in class from time to time. It is important to work on these right away. They will often be referred to the next day in class.

The third type is online homework through webwork. These are the only assignments that will be graded. Webwork can be accessed from any computer with an internet connection and a web browser. The link to the login page for the course is **webwork.math.cwu.edu/webwork2/math172odell/** .

The sections covered in the book of the webwork assignments are as follows:

HW1(2.1, 2.2, 2.3) and HW2(2.4, 2.5, 2.6)

HW3(3.1, 3.4, 3.5)

HW4(3.2, 3.6, 3.9)

HW5(3.3)

HW6(3.7)

HW7(3.8)

HW8(4.2, 4.3, 4.4, 4.6)

HW9(4.7)

HW10(3.10)

General Course Policies:

Daily attendance is expected and considered necessary for success. It is your responsibility to find out what was covered on days you were absent. You are responsible for any announcements made in class regarding homework, exams, and quizzes. Handouts from class will be posted on Canvas.

Students with disabilities who wish to set up academic adjustments in this class should give me a copy of their "Confirmation of Eligibility for Academic Adjustments" from the Center for Disability Services as soon as possible so we can discuss how the approved adjustments will be implemented in class. Students without this form should contact the Center for Disability Services, Bouillon 205 or dssreceipt@cwu.edu or 963-2171.

I reserve the right to change the details contained in this syllabus as dictated by developments during the quarter.