

Instructor: Cen-Tsong Lin

Office: Bouillon 108B (Tel: 963-2842)

E-mail: ctl@cwu.edu

Office hours: 1:00 – 2:00 PM, Monday – Thursday or by appointment

Learning outcomes:

Upon completion of Math 172, students will be able to:

1. Investigate limits and continuity of functions;
2. Compute derivatives using the definition;
3. Differentiate a variety of functions using the basic differentiation rules;
4. Demonstrate conceptual understanding of the derivative of a function, including
 - (a) graphical representation related to the slope of the tangent line,
 - (b) numerical representation related to relative rates of change,
 - (c) relationship with one-dimensional motion, and
 - (d) modeling rate of change problems, including related rates.
5. Use first and second derivatives to
 - (a) describe the behavior of curves,
 - (b) solve optimization problems, and
 - (c) create complete graphs of functions without using technology;

Required material:

Textbook: Rogawski and Adams, Calculus, 3rd ed., Freeman. This course will cover selected material from chapters 1 – 4.

A graphing calculator (TI-83/84 is recommended) is required for class work and homework.

Access to **Canvas**. I will post course syllabus, grades, assignments, and other important stuff here.

Access to **WeBWorK** for homework assignments

Course Policies:

Attendance: Daily attendance is expected and considered necessary for success.

- Homework: Daily homework will be assigned with specified submit method (WeBWorK or Canvas) and due date. The WeBWorK URL is: <http://webwork.math.cwu.edu/webwork2/math172Lin>
- Tests: There will be three 100-point tests, tentative testing dates are: 1/22, 2/12 and 3/4
- Final exam: Comprehensive, 8:00 – 10:00 AM, Thursday, 03/17/2016

Make-up tests will be given only when you can document a circumstance that is beyond your control that prevents you from taking the test.

Your final grade will depend on:

Homework	scaled to 150 points
Three in-class tests	300 points
Final exam:	150 points
Total	600 points

Course grade will be assigned based on the following scale:

93% → A	90% → A-
87% → B+	83% → B
80% → B-	
77% → C+	73% → C
70% → C-	
67% → D+	63% → D
60% → D-	