

Instructor: Dr. Cen-Tsong Lin

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Office hours: 11 – 11:50 MTWTF

Web Page: www.cwu.edu/~ctl

Course Goals: Upon successful completion of this course, the student will be able to:

- Compute partial sums;
- Identify a geometric series and, if it converges, compute its sum;
- Apply various tests for convergence (integral, comparison, ratio);
- Determine the interval of convergence for a power series;
- Find the Taylor Polynomial of degree n and the Taylor Series representation for a function;
- Differentiate and integrate Taylor Series;
 - Perform algebraic computations involving vectors
 - Magnitude;
 - Unit vector;
 - Dot Product;
 - Cross Product;
 - Vector projections;
- Utilize the Dot /Cross Product to
 - Answer question involving orthogonality;
 - Find equations of plane;
 - Compute areas and volumes;
- Describe and recognize graphs of functions of two variables;
- Determine limiting and continuity properties of functions;
- Compute partial derivatives, differentials, gradients, and directional derivatives;
- Find equations of tangent planes;
- Find local and global extrema;
- Communicate verbally and in writing of one's understanding of mathematical concepts to others.

Prerequisite: MATH 173 with a grade of C or higher.

Textbook: Calculus, 5th edition, by Hughes-Hallett

Evaluation:

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| • Homework assignment | 15% | |
| • 3 in-class tests (20% each) | 60% | Tentative dates: 10/11, 11/01, and 11/22 |
| • Final exam | 25% | 8 – 10 AM, Thursday, 12/12/2013 |

Course Conduct:

- Homework will be assigned daily with specified due date. No late assignment will be accepted.

- Makeup test will be given only when you can document a circumstance that is beyond your control and unexpectedly prevent you from taking the scheduled test.

Course grade: Grading:

Your grade will be assigned based on the following scale:

	93% → 100% A	90% → 92% A-
87% → 89% B+	83% → 86% B	80% → 82% B-
77% → 79% C+	73% → 76% C	70% → 72% C-
67% → 69% D+	63% → 66% D	60% → 62% D-
below 60% F		

I reserve the right to adjust the above scale (in student's favor) if deemed appropriate.