Math 180-07~12 Elements of Calculus   Fall 2017

Instructor: Dr. Wei-Bin Zeng
Office: 216 Natural Sciences Building
Hour: 9:30 – 10:30 a.m., MW, and by appointment
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Class Time: 8:00 – 8:50 a.m., MWF, NS 112. Recitations on Wednesday, scheduled as below
180-07: 9:00 - 9:50 NS 317 (Bamforth)   180-08: 9:00 - 9:50 NS 128 (Townson)
180-09: 10:00 - 10:50 NS 317 (Coffman)   180-10: 10:00 - 10:50 NS 212C (Townson)
180-11: 11:00 - 11:50 NS 317 (Townson)   180-12: 11:00 - 11:50 LF 130 (Estes)

Text: ***CALCULUS for Business, Economics, Life Sciences, and Social Sciences***, 13th edition, by Barnett, Ziegler, and Byleen, Prentice Hall

Material: Chapters 1 – 5, with some sections omitted. Topics covered include *an introduction to functions, their graphs and transformations; elementary functions such as polynomials and rational functions, exponential and logarithmic functions; limits, continuity, derivatives (with applications), and integrals of the elementary functions.*

Quizzes: There will be (weekly) quizzes at recitations, based on the exercises from each section. 10 best will be counted toward the total points.

Grading: Attendance to lectures (50 points) will be taken randomly, . There are four Exams worth 100 points each. A tentative schedule for everything is given below. With 100 points for quizzes, you can earn up to 550 points totally. The course grade will be assigned based on your total points in the following scheme (with plus/minus grade in the upper/lower 2% range):
    495 – 550 (above 90%) A   440 – 494 (80% - 89%) B
    385 – 439 (70% - 79%) C   330 – 384 (60% - 69%) D
      0 – 329 (below 60%) F

Remarks:

- This course satisfies the mathematics component of the quantitative reasoning of the general education requirement. See the next page for the details.
- At the end of each chapter, there is a *Summary and Review* together with *Review Exercises*. Go over all of them carefully. Do as many problems as you can.

Tentative Schedule:

The Week of	Section Covered	The Week of	Section Covered
8/21 – 8/24	1.1 - 1.4	10/16–10/20	Exam 2, 4.1, 4.2
8/28 – 9/01	1.5, 1.6, 2.1	10/23–10/27	4.3, 4.4
9/06 – 9/08	2.2 - 2.4	10/30–11/03	4.5, 4.6, Review 3
9/11 – 9/15	2.5, 2.7, Review 1	11/06–11/10	Exam 3, 5.1, 5.2
9/18 – 9/22	Exam 1, 3.1	11/13–11/17	5.3, 5.4
9/25 – 9/29	3.2, 3.3	11/20	5.4
10/2 – 10/6	3.3, 3.4, 3.5	11/27–12/01	5.5. Review 4
10/11–10/13	3.6, Review 2	12/04	Exam 4

Message from the University required to be in syllabi of all classes

General Education Requirement

The university's General Education Curriculum Committee (GECC) has the following General Education learning outcomes for the content area of Mathematics:

Mathematics (3 hours in Mathematics) is concerned with solving real-world problems through mathematical methods. Students who satisfy this requirement will demonstrate that they are able to do all of the following:

1. Represent mathematical information symbolically, visually, and numerically;
2. Use arithmetic, algebraic, and geometric models to solve problems;
3. Interpret mathematical models, such as formulas, graphs, and tables;
4. Estimate and check answers to mathematical problems, determining reasonableness; alternatives; and correctness and completeness of solutions.

The General Education Program at the University of Louisville fosters active learning by asking students to think critically, to communicate effectively, and to understand and appreciate cultural diversity.

 The complete program of learning outcomes is available online at https://louisville.edu/provost/ger/ger-preface.

Title IX/Clery Act Notification

Sexual misconduct (including sexual harassment, sexual assault, and any other nonconsensual behavior of a sexual nature) and sex discrimination violate University policies. Students experiencing such behavior may obtain **confidential** support from the PEACC Program (852-2663), Counseling Center (852-6585), and Campus Health Services (852-6479). To report sexual misconduct or sex discrimination, contact the Dean of Students (852-5787) or University of Louisville Police (852-6111).

Disclosure to **University faculty or instructors** of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on campus, in a University-sponsored program, or involving a campus visitor or University student or employee (whether current or former) is **not confidential** under Title IX. Faculty and instructors must forward such reports, including names and circumstances, to the University's Title IX officer.

For more information, see the Sexual Misconduct Resource Guide (http://louisville.edu/hr/employeerelations/sexual-misconduct-brochure).