MATH 3360 - 04 Differential Equations   **Spring 2017**
MWF 2:00 pm - 2:50 pm   **Room: PS 308**

Instructor: Dr. Yunrong Zhu   **Office**: PS 328B   **Phone**: 282-3819   E-Mail: zhuyunr@isu.edu

Course Website: MOODLE   **Office Hours:** MW 1:00 pm - 2:00 pm, or by appointment

Textbook: *Elementary Differential Equations*, 10th Edition, by William E. Boyce and Richard C. DiPrima, Wiley 2012. We will cover most part of Chapters 1-7.

Prerequisites: Math 1175 (Calculus II) with a grade of C- or better.

Course Objectives: This course provides an introduction to the theory, solution and application of *ordinary differential equations* – the equations involving the derivative of a single independent variable. It Topics discussed in the course include methods of solving first-order differential equations, higher-order differential equations, modeling with first-order and higher-order differential equations, series solution of linear equations, systems of linear first order differential equations, and numerical solutions of ordinary differential equations. Applications of differential equations in sciences are presented.

Homework: The homework problems will be posted on MOODLE, and will be collected each week **at the end of Friday's class**. The written homework must be neatly organized and the arguments should be easy to follow. Arrange the papers in correct order and **staple** all the sheets. **NO later homework is accepted for any reason, and any missing assignment will be 0.** Your three lowest scores will be dropped.

In-class Worksheets and Quizzes: In class worksheets and quizzes will be given throughout the semester. The questions on the quizzes will be based on the homework, worksheet problems and examples shown in class. You must be present in the class to take the quizzes or worksheets, and **NO make-up** will be given for any reason. Your two lowest quiz/worksheet scores will be dropped.

Exams: There will be three in-class exams with the tentative schedule as follows:

> **Exam #1**:   **Friday, Feb. 10**
> **Exam #2**:   **Friday, Mar. 17**
> **Exam #3**:   **Friday, Apr. 21**

A **Comprehensive Final Exam** will be held on **Wednesday, May 3, 12:30-2:30 p.m**. All these exams will be held in PS 308. You must take the exam at the scheduled time. You are allowed to use one hand-written $3'' \times 5''$ notecard (both sides) for all the exams.

Makeup Exams: There will be **NO** makeup exams. Exceptional and well-documented circumstances will be considered on an individual basis. Any missed exam will be 0.

Calculators: A graphing calculator (e.g. TI-83 or HP-48) is recommended in this course. A basic scientific calculator should be sufficient for the quizzes and exams. On the other hand, it is **NOT allowed** to use calculators and other electronic devices with Internet access or symbolic algebra/calculus. Using such devices or other form of unauthorized materials during an exam amounts to cheating.

Grading: : Students course grade will be based on HW, worksheets and quizzes, two in-class midterm exams, and the final exam. There will be NO "extra credit" work. The weights are distributed as follows:

15% HW+ 10% quizzes+ 45% Midterm Exams + 30% Final.

A+	93% and above	C	73%–76%
A-	90%–92%	C-	70%–72%
B+	87%–89%	D+	67%–69%
B	83%–86%	D	63%–66%
B-	80%–82%	D-	60%–62%
C+	77%–79%	F	59% and below

Academic Integrity and Dishonesty: Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is expected of all individuals in academe. Academic dishonesty in any form is unacceptable. Academic dishonesty includes, but is not limited to, cheating and plagiarism. All Idaho State University Policies regarding ethics and honorable behavior apply to this course (see http://www2.isu.edu/policy/4000/index.shtml).

Extra Help: Do not hesitate to come to my office during office hours or by appointment to discuss a homework problem or any aspect of the course. Free tutoring is available from the Math Center in the Student Success Center, Rendezvous 327 in Pocatello and CHE Room 220 in Idaho Falls. Information is available at http://www.isu.edu/success/math/index.shtml.

ADA Policy: Idaho State University is committed to providing equal opportunity in education for all students. If you have a diagnosed disability or if you believe you have a disability (physical, learning, hearing, vision, psychiatric) that might require reasonable accommodation in this course, please contact the Disability Services Center, Rendezvous Building, Room 125 (282-3599) http://www.isu.edu/disabilityservices.