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

Fall 2014

Room: PS 313

Course Website: MOODLE Office Hours: MW 11:00 am - 12:00 pm, or by appointment

Textbook: Introduction to Real Analysis, 4th edition, by Robert G. Bartle and Donald R. Sherbert, Wiley 2011. We will thoroughly cover Chapters 1-5.

References:

- Kenneth Ross, Elementary Analysis: The Theory of Calculus, Second Edition, Springer, 2013.
- Steven R. Lay, Analysis with an Introduction to Proof, Fifth Edition, Pearson, 2013.

Prerequisites: Math 1175, and either MATH 2240 or Math 2287.

Course Objectives: This is a beginning course in the foundations of calculus. The primary objective is to introduce the fundamental principles of mathematical analysis through detailed study of the properties of real number system. A secondary objective of this course is to improve the formal proof writing skills. You will learn to write complete, effective and rigorous arguments to prove whether a statement in elementary analysis is true or false.

Homework and Quizzes: The homework problems will be posted on MOODLE, and will be collected each week at the end of Friday's class (except Exams). 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. After you finish the proof, read it to yourself to see whether your arguments make sense. Please also check the grammar and spelling. NO later homework is accepted for any reason, and any missing assignment will be 0. Your three lowest scores will be dropped.

Throughout the semester, several in class quizzes will be given. The questions are based on the homework or review 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 scores will be dropped.

Exams: There will be three in-class exams and one two-hour cumulative final exam with the tentative schedule as follows:

Exam #1: Monday Sep. 29, On Chapter 1-2

Exam #2: Monday Oct. 27, On Chapter 3 Exam #3: Friday Dec. 5, On Chapter 4-5

Final Exam: Monday, Dec. 15, 10:00 am - 12:00pm

All these exams will be held in the classroom PS 313.

Makeup Exams: Students who have a valid documented reason, such as a unavoidable emergency, illness, or university commitments during regular examination times are permitted to schedule a makeup examination with no penalty. In such case, you must contact me or has somebody else contact me before the exam if possible, but no later than the next class meeting. To take the makeup exam, you must present the documentation for the emergency. Any missed exam will be 0.

Grading: Students course grade will be based on HW, quizzes, three 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	С	73%-76%
A-	90%-92%	C-	70%– $72%$
B+	87%-89%	D+	67% - 69%
В	83%-86%	D	63% - 66%
В-	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. ANY use of an electronic device or other form of unauthorized materials during an exam will be considered cheating. All Idaho State University Policies regarding ethics and honorable behavior apply to this course (see http://www.isu.edu/policy/5000/5000-Student-Conduct-System.pdf).

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.