Oregon Institute of Technology
Math 311–Introduction to Real Analysis
Course Syllabus – Winter 2019

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Time and Place:  MWF 9 to 9:50, in OW 213

Office Hours:  MW 1-1:50, WRF 11-11:50. These are hours I am available for help on a first come first serve basis. If you can’t make it to any of these hours, try to find me when I’m not in class or phone/email to make an appointment.

Text: “Introduction to Real Analysis, 4th Ed”, Author: Bartle and Sherbert

This text is freely available online (link to text is posted at the course webpage).

Calculators:  A scientific calculator or graphing calculator is recommended.

Catalog Description: A one quarter stand alone course on topics in real analysis, covering properties of real numbers, completeness axiom, continuity, convergence of sequences and series of real numbers, convergence of sequences and series of functions. Emphasis will be placed on proofs. Prerequisites: Math 310 or Math 327 (C or better).

Course Objectives:

1. State definitions and theorems.
2. Provide examples and counter-examples.
3. Construct mathematically sound proofs.
4. Demonstrate proper use of mathematical language, notation, and symbols.

Course Learning Outcomes:

1. Demonstrate a working knowledge of the real number system.
2. Demonstrate a working knowledge of sequences of real numbers.
3. Be able to demonstrate a working knowledge of set theory on the real line.
4. Demonstrate a working knowledge of functions.

General Grading Policy:

Assignments – 20%, Quizzes – 10%, 3 Exams – 50%, Final Exam – 20%.

Course Grade Cutoff’s: 90% and above -- A, 80 thru 89% -- B, 70 thru 79% -- C

60 thru 69% -- D, Below 60% -- F.
Assignments: The written assignments will be a combination of problems from the text and handouts. Most problems (proofs) require solutions to be written with complete sentences and with appropriate mathematical formatting. The formatting requirements will be explained further in class. Assignments must be typed using a word-math processor such as Latex.

Quizzes: There will be short homework quizzes approximately weekly. The quiz problems will be selected from a list of problems. This list will be posted online in advance of the quiz day. To allow for unavoidable situations the lowest two quiz scores will not be counted.

Exams: There will be three equally-weighted exams administered during the quarter. The exams will occur during the 3rd, 6th and 9th week. The specific dates for these exams will be announced in class and posted online.

Final Exam: The final exam is comprehensive. The final exam will be given in our usual classroom on Tuesday of finals week from 8 to 10. This is the only day and time the final exam will be administered.

Make-up Exams: If you are involved in a campus function that interferes with an exam or quiz, you may make arrangements to take the exam at an earlier date. It is the student’s responsibility to schedule an early exam. Make-up exams may be given in cases where extreme and unavoidable circumstances prevent a student from taking an exam at the originally scheduled time.

Accommodation: Students with a documented disability who require assistance or academic accommodations should contact the office of Disability Services immediately to discuss eligibility. Disability Services staff are located on both the Klamath Falls and Wilsonville campuses, however arrangements can be made to meet with a student on any campus. Meetings are by appointment only, so please contact the Disability Services office at the campus closest to you: Klamath Falls (541) 885-1790 and Portland-Metro (503) 821-1305. Specific information and Disability Services forms can be found at www.oit.edu, then go to “Academics” and click on “Student Success Center” and then “Disability Services.” This link leads to the department’s website: http://www.oit.edu/academics/ssc/disability-services