

**Eastern Oregon University**  
**Course Syllabus**

**Number of Course:** MATH 462

**Name of Course:** Applied Regression Analysis

**Catalog Description:**

An introduction to statistical methods in regression and analysis of variance through the unifying theme of the general linear model.

**Credit Hours:** 4

**Required Texts or Suggested Materials:**

Are available at: <http://eou.bncollege.com/>

**Prerequisites:**

STAT 243 and MATH 341 required; STAT 352 recommended. Student must have at least junior standing to register for this course.

**Learning Outcomes:**

By the end of the term, the successful student should be able to

- explain the mathematical theory underlying the least-squares regression equation for simple and multiple linear regression;
- identify the assumptions associated with the general linear model;
- apply statistical methods in analyzing data, including hypothesis tests and confidence intervals associated with parameters of the general linear model, and explain the mathematical justification of such methods.
- apply diagnostic techniques to determine the validity of model assumptions, and apply remedial measures as needed.

**Course Requirements:**

In order to receive a grade, the student must complete all exams. In addition the student is expected to attend class regularly, participate in discussion, and complete all quizzes and assignments. A portion of the work in this course will consist of student presentations of proofs and problem solutions.

**Grading Policies:**

Course grades will be determined by your total number of points based on the following distribution:

2 one-hour exams	200 points
10-15 quizzes/assignments	100 points
final exam	100 points
	total 400 points

In addition, the instructor reserves the right to adjust final grades up to one-half of a letter grade based on subjective academic criteria such as class participation, quality of written work, etc.

**Means of Assessment:**

Student progress toward the course objectives will be assessed via in-class exams, quizzes, homework, and in-class student presentations of solutions to assigned problems.

**Attendance Note:**

There is no general allowance for make-up exams or quizzes. If you will miss an exam or quiz because of school business, you will be expected to make alternative arrangements with me before the scheduled event.

**Brief Outline of Course:**

Most of chapters 1-3 and 5-8 of the text will be covered, with some additional topics as time permits:

- Chapters 1 and 2 (about 4 weeks)
- Chapter 3 (about 1 week)
- Chapter 5 (about 1 week)
- Chapters 6 and 7 (about 2 weeks)
- Chapter 8 (about 1 week)
- Chapter 9 (about 1 week)

**Writing Center Statements:*****For on-campus courses***

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU's undergraduate and graduate students who are writing for any course at any level, or who are writing resumes, job letters, graduate applications, and more. Go to [eou.mywconline.com](http://eou.mywconline.com) to schedule an appointment in the Writing Center (Loso Hall 234).

***For online or on-site courses***

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU students writing for any undergraduate course. Go to [EOU's eTutoring page](#) to submit a paper to a writing tutor.

***For graduate courses***

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU students writing for any graduate course. Go to [EOU's eTutoring page](#) to submit a paper to a writing tutor. Click on [Graduate Students How To](#) for information about tagging your submission.

**Classroom Decorum:****Academic Misconduct Policy:**

Eastern Oregon University places a high value upon the integrity of its student scholars. Any student found responsible for an act of academic misconduct (including but not limited to cheating, unauthorized collaboration, fabrication, facilitation, plagiarism or tampering) may be subject to having his or her grade reduced in the course in question, being placed on probation or suspended from the University, or a combination of these. (Please see the Student Handbook online at <http://www.eou.edu/sse/student-handbook/>).

**Accommodations/Students with Disabilities policy:**

Any student who feels he or she may need an accommodation for any type of disability, must contact the Disability Services Office in Loso Hall, Room 234. Phone: 541-962-3081.

**Disclaimer:**

This standard syllabus provides only general information on the course. For those enrolled in the course a detailed syllabus will be provided by the Instructor at the beginning of the term. Please keep in mind that not all courses are offered every year. Consult Webster for scheduling information.

**Date:** 2018