

**Eastern Oregon University
School of Arts and Sciences
Course Syllabus, Spring 2009**

Number of Course: Statistics 244

Title of Course: Linear Correlation and Regression Analysis

Location and Time: TBA

Instructor: TBA

Catalog Description: This is an introduction to concepts of linear correlation and regression analysis. Students will also work with statistical computing packages such as MINITAB.

Prerequisite: MATH 095

Credits: One

Text: *Statistics, fourth edition*, by Freedman, Pisani, and Purves

Outline: This course is an introduction to the basic topics of correlation and regression analysis. The material is covered by Chapters 8-12 of the text. The course is organized to meet twice weekly for three weeks. Topics covered will include:

- the fundamental notion of correlation between variables, and interpretations of the correlation coefficient,
- use of the regression technique to make predictions about data values,
- the regression effect,
- use of rms error of the regression line,
- use of the regression technique to analyze a restricted portion of a data set.

Course Objectives and Learning Outcomes:

By the end of the term, the successful student will demonstrate the ability to:

- interpret correlation coefficients in the context of several examples
- determine the regression equation for a data set given the appropriate information
- use the regression technique to make predictions about data values
- recognize the role of the regression effect in explaining certain phenomena
- use Minitab to conduct regression analysis of large, bivariate data sets.

Assessment: Progress toward the outcomes listed above will be measured through graded homework and quizzes, in-class contributions, and one comprehensive examinations. Course grades will be determined by your total number of points based on the following distribution:

1 one-hour exam	100 points
3-4 quizzes/assignments	50 points
total	150 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.

Academic Integrity: Eastern Oregon University places a high value upon the integrity of its student scholars. Any student found guilty of an act of academic misconduct (including, but not limited to, cheating, plagiarism, or theft of an examination or supplies) 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 being expelled from the University or a combination of these. Please see Student Handbook at: <http://www.eou.edu/saffairs/handbook/honest.html>

Disability Services: If you have a documented disability or suspect you have a learning problem and a need for reasonable accommodations, please contact the Disability Services Program in Loso Hall 234, telephone: 962-3081.

Syllabus prepared by John Thurber

April 15, 2009