

Faculty Showcase '05: Partners in Learning

Sponsored by Academic Technology at Simmons College



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Goals

- To offer an online statistics course that prepares students for entry into any of the SHS programs.
- To tailor the course to meet the special nature and requirements of the programs within SHS.
- To create a model that others can adapt to meet their own needs.

A PTRC Partnership Project

This project received PTRC funding

Webstat: An Online Statistics Assessment Tool and Course

Overview

Students applying to each of the four graduate programs in the School for Health Studies must satisfy a statistics prerequisite prior to matriculation. According to Math and SHS Professor Robert Goldman, "When students need to take statistics or want a refresher, they have to go to another school because Simmons doesn't offer it." In addition, few statistics courses are available online because it is a difficult subject to master without proper support and monitoring.

WebStat, developed in collaboration with PTRC and a team of "stats mavens," is designed to meet this pressing educational need. Students use a printed textbook/CD-ROM package for self-paced statistics learning.

A companion course web site developed by Simmons serves as the "online emcee." The online component offers commentary on topics covered in the text, practice problems, and administers graded homework assignments and exams. *WebStat* provides high quality statistics education online.

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(b) Compute the equation of the regression line relating cholesterol level to fat intake. Do this in two ways - (i) by keying in the raw data into your calculator and using the **a** and **b** keys.

$a = b_0 = 95.0362$

When you have entered all 8 pairs of xy values in this way, use the key sequence recall a to get b0 equals 95.0362 and the key sequence recall b to get b1 equals 1.79029.

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(d) Use the equation of the regression line to predict the cholesterol level for a woman who takes in 40 grams of saturated fat.

Scatterplot of Chol vs. Fat Con

FatCon	Chol
30	150
40	166.64
50	180
60	190
70	200
80	210

Progress

Version 3 of the course, which incorporates a number of interactive enhancements, is currently in session.

Applications Beyond SHS

All graduate schools at Simmons require courses in statistics and/or research methods. *Webstat* is being adapted for use in the School of Social Work.

