SU DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE
SYLLABUS *(Tentative)*
MATH 314 *Regression Analysis*

Objectives: To study relationships between variables and to build appropriate models of these relationships through regression analysis. Common statistical packages such as SPSS and/or MINITAB will be used for all analyses.

Intended for: Students who need a more advanced course in applied statistics in order to apply statistical methods to their own data and to interpret results of others.

Prerequisite: A Statistics course.

Text: "Introduction to Regression Modeling," by Abraham and Ledolter; Duxbury 2006.

	Hours
Chapter 1 *Introduction to Regression Models*	2.0
Chapter 2 *Simple Linear Regression*	8.0
Chapter 3 *Matrix Algebra*	2.0
Chapter 4 *Multiple Linear Regression Model*	10.0
Chapters 5 *Specification Issues*	4.0
Chapter 6 *Model Checking*	8.0
Chapter 7 *Model Selection*	8.0
Chapter 9 *Non-Linear Regression*	4.0
Chapter 11 *Logistic Regression*	4.0
Chapter 8 *Case Studies*	3.0
Tests	<u>3.0</u>
	56.0

EVALUATION
Project 10%
Homework and quizzes 15%
Tests 50%
Final examination 25%

NOTE: ONCE A STUDENT HAS RECEIVED CREDIT, INCLUDING TRANSFER CREDIT, FOR A COURSE, CREDIT MAY NOT BE RECEIVED FOR ANY COURSE WITH MATERIAL THAT IS EQUIVALENT TO IT OR IS A PREREQUISITE FOR IT.

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