

STATISTICS 465 STATISTICAL COMPUTING (3) (EFFECTIVE FALL 2007 )
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PREREQUISITES: Stat 325

CATALOG DESCRIPTION: Programming with major statistical software packages. Emphasizes the use of computers to perform statistical procedures and the interpretation of statistical output.

COURSE OBJECTIVE: The course prepares students majoring in the mathematical sciences for careers involving Statistics. Since statistical computing is performed in all disciplines, this course should benefit students from many disciplines including engineering, agriculture, business and education in obtaining and interpreting results from their data using the statistical software package.

The student will:

1. Have acquired the basic skills to input data into the statistical software package.
2. Be able to manipulate and analyze the data using the statistical software package.
3. Be able to obtain output for various statistical procedures using the statistical software package.
4. Be able to interpret the output from the statistical software package.

TEXT: Applied Statistics and the SAS Programming Language, Fourth Edition, Ronald P. Cody and Jeffrey K. Smith, ISBN # 0-13-743642-4

OUTLINE: CHAPTER	TITLE (SECTIONS)		PERIODS
2	Describing Data	(A-J)	4
3	Analyzing Categorical Data	(A-P)	4
4	Working with Date and Longitudinal Data	(A-E)	3
5	Correlation and Regression	(A-L)	4
6	T-tests and Nonparametric Comparisons	(A-F)	3
7	Analysis of Variance	(A-H)	4
12	The SAS INPUT Statement	(A-L)	3
13	External Files : Reading and Writing Raw and System Files	(A-J)	4
14	Data Set Subsetting, Concatenating, Merging, and Updating	(A-F)	3
17	A Review of SAS Functions : Part I.	(A-F)	3
18	A Review of SAS Functions Part II.	(A-P)	4
19	Selected Programming Examples	(A-U)	<u>3</u>
20	Syntax Examples		42