

WEBSTER UNIVERSITY

COURSE SYLLABUS

MTHC 5390.01

Craig Hannick

COURSE NUMBER AND SECTION

INSTRUCTOR

STATISTICS

TERM: F I

YEAR: 2005

COURSE TITLE

F II

SP I

50 WEBH405 5:00-8:40 pm

SP II

SITE ROOM TIME

SU X

1. Course Description: (Student focus, rationale, scope, prerequisites)

This course is a thorough introduction to the field of Statistics. The course emphasizes the organization and analysis of data with appropriate statistical interpretation of the results.

2. Learning Outcomes: (Goals, objectives, course outcomes, etc.)

Students will gain a deeper appreciation for the subject of Statistics. Students will become proficient in using the statistical capabilities of the TI83/84 calculators and will apply their statistical interpretive skills to given hypotheses after analysis of data.

3. Schedule of required readings, class preparations and assignments, lectures, discussions, student presentations, and exams:

CLASS 1: **Exploratory Analysis of Data:** Graphical Displays, Summarizing
6/20/05 Distributions, Comparing Distributions

CLASS 2: Bivariate Data, Transformations of data
6/22/05

CLASS 3: Categorical Data, Frequency Tables
6/27/05 **Planning a Study:** Methods of Data Collection,
Surveys

CLASS 4: Planning and Conducting Surveys
6/29/05

CLASS 5: **EXAM I**
7/6/05

CLASS 6: **Probability:** Probability, Random variables
7/11/05

CLASS 7: Normal Distributions, Sampling distributions
7/13/05

CLASS 8: **Statistical Inference:** Confidence Intervals, Tests of
7/18/05 Significance

CLASS 9: Tests of Significance; Nonparametric Statistics
7/20/05
CLASS 10: Chi-Square; ANOVA
7/25/05
CLASS 11: **EXAM II**
7/27/05

4. Resources

Text Used: ***Barron's Statistics, 3rd Ed.***, by Martin Sternstein, Ph.D.

Supplemental Readings: (List and indicate how these are to be used.)

Audio Visual/Other:

5. EVALUATION:

- a) Term Paper(s)
- b) Examinations X
- c) Class participation X
- d) Class presentation
- e) Other

This syllabus is subject to change at the discretion of the instructor.
Therefore, regular attendance is required.