STA 575 - Nonparametric Statistics
Fall 2014

Instructor: Dr. Scott Richter

Office: Petty 107 Phone: 256-1123
Hours: By appointment email: sjricht2@uncg.edu

I. About the course

This course is an introduction to nonparametric statistical methods. Topics include nonparametric methods for one, two and k independent samples, two or more dependent samples, measures of association, contingency tables with nominal and ordinal variables, nonparametric bootstrapping techniques, density estimation and smoothing. After completing the course, students will be able to: 1) explain the difference between nonparametric and parametric methods; 2) determine when nonparametric methods are more appropriate; 3) apply selected nonparametric methods to data and explain the results of their analysis.

Prerequisite: grade of at least "C" in STA 291 or STA 352 or STA 661 or permission of instructor. Students are expected to be familiar with normal and binomial distributions, *t*-methods for one and two sample tests and confidence intervals, one-way analysis of variance, bivariate correlation and regression, tests and confidence intervals for proportions, analysis of contingency tables.

We will use the text: An Introduction to Modern Nonparametric Statistics by James J. Higgins, and expect to cover most of the material in Chapters 1-5, 8, and 10, as well as selected topics from other chapters if time permits.

II. Assignments and Tests

1) Assignments consisting of exercises from the text and occasionally supplementary exercises will be assigned regularly, collected and graded. These will be designed to provide practice and to help synthesize readings, class discussions, and lectures. ***Late assignments will not generally be accepted without prior arrangement, and will receive a score of zero.***

2) There will be two exams. The exam dates will be announced in class.

Graduate students: Graduate students will be expected to demonstrate a deeper understanding of concepts, and will be expected to complete additional exercises on assignments and tests.

Student collaboration:
Students are encouraged to discuss solutions to Assignments, but the final write-ups for submission should be done independently.

III. Determination of course grade

Tests: 40% of course grade.
Assignments: 60% of course grade.

Grading scale:

Overall average	Grade	
90 or above	A or A-	
80-89	B+, B or B-	
70-79	C+, C or C-	
60-69	D+, D or D-	*
Below 60	F	

*Note: For graduate students an overall average below 70 corresponds to a grade of "F".

IV. Academic Integrity

Students are encouraged to discuss solutions to assignments, but each student is expected to write up his or her solutions independently. Copying other people's work is plagiarism and is an Academic Integrity violation. You are responsible for knowing and abiding by the UNCG Academic Integrity Policy.

V. Disabilities

If you have a documented disability and wish to discuss academic accommodations, please contact me as soon as possible.