Course Module
Stephen F. Austin State University
STA 321-001 Nonparametric Statistics
M 357 8-8:50AM MWF

Instructor
Robert K. (Bob) Henderson
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BA in Math & History – Trinity University, San Antonio, TX (1978)
MS in Mathematical Statistics – Southern Methodist University, Dallas, TX (1980)
PhD in Mathematical Statistics – Southern Methodist University, Dallas, TX (1982)
MBA – University of Delaware, Newark, DE (1988)
Worked in industry for 27 years: ~6 years with DuPont as internal consultant for a variety of businesses
and staff groups; then ~21 years in the semiconductor business, most with a supplier of a key enabling
material for semiconductor production; and later with Samsung working primarily with engineers in
process control efforts. The entire 27 years included many training delivery, as well as course
development activities related to basic statistics, experimental design, and process control systems. Fall
2009 was first semester working at SFA.

Teaching Hours – 8 to 8:50AM & 10-10:50AM MWF, 2 to 3:15PM TR, 3:30-5PM W
Office Hours – MWF 9-10AM, MW: 2-3:30PM, TR 10AM-12PM, and by appointment

Course Goals
This course ideally will provide students with a review of basic concepts in probability and statistical
inference as a foundation for an introduction to and understanding of the most basic nonparametric
statistical analysis procedures.

Text
0-471-16068-7

Computer Access/Skills
This course will ultimately focus more on applications than theory; consequently, it will be helpful to
have some facility in working with data using a computer. Some of the course work might be facilitated
with the use of a statistical software package (JMP is one such package, R is another). Knowledge of
and ability to utilize Microsoft Office programs – Excel, Word, and Powerpoint – will also often be
beneficial. Almost all workplaces expect some skills in working with these packages, and use them for
reporting and/or presentation purposes.

Pre/Corequisites
MTH 220 or equivalent

Course Syllabus
The official course syllabus can be found at:
http://www2.sfasu.edu/math/courses/syllabi/STA321Syllabus.pdf
Course Overview

Weeks 1-3: Probability Theory Overview (Chapter 1)
Weeks 4-6: Statistical Inference Review (Chapter 2)
Weeks 7-9: Tests Based on the Binomial Distribution (Chapter 3)
Weeks 10-11: Contingency Tables (Chapter 4)
Weeks 12-15: Some Methods Based on Ranks (Chapter 5)

Grading

Grades will be determined by the following:

Homework 60%
Exams/Projects 40%

About Assignments

Homework problems from the text will be assigned and periodically collected (not necessarily all will be collected). When collected, one or two of the assigned problems (likely not all) will be selected for grading.

Students may be asked to periodically present some course material and/or problem solutions in class, either individually or as a small group. These presentations will be evaluated by the instructor. In addition, students will be asked to evaluate the contribution of their fellow group members (colleague evaluations) when problems are assigned to specific groups.

Exams and/or projects will be assigned once or twice during the semester. Assigned projects might be individual or small group projects, and likely will be required to be presented in class.

Attendance

Attendance is not mandatory, but students must attend classes where presentations are given to receive the highest possible scores. If you know you are going to have to miss a specific class, please let me know via e-mail or phone prior to the class.

Academic Integrity

It is the responsibility of the student to abstain from cheating. Dishonesty of any kind with respect to examinations, written assignments [completed] in or out of class, alteration of records, or illegal possession of current examinations or keys to examinations shall be considered cheating. Courtesy and honesty require that any ideas or materials borrowed from another must be fully acknowledged. Offering the work of another as one’s own is plagiarism. The subject matter of ideas thus taken from another may range from a few sentences or paragraphs to entire articles copied from books, periodicals, or the writing of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment is also considered plagiarism. Any student who fails to give credit for ideas or materials taken from another is guilty of plagiarism.

Definition of Academic Dishonesty

Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism.
Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit. (from SFA on-line Student Handbook)

A full description of university procedures and penalties in response to cheating and plagiarism can be found in the on-line Student Handbook in the Academic Integrity section at http://www.sfasu.edu/policies/academic_integrity.asp.

All of the above is the official policy of the school; however, the ultimate defender of academic integrity is each individual student. In this class, it might be helpful to work in small groups on the problems. Sharing ideas and helping each other with approaches to understand and solve the problems is not considered cheating or plagiarism. Copying someone else’s work is considered cheating. You are encouraged to discuss the problems with others outside the classroom, but do your own work, write your own discussion of the problems and steps you used to obtain a solution. You are all considered adults, and until you provide evidence to the contrary, will be relied upon to set appropriate boundaries in how you work with others through the duration of this class.

Withheld Grades
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities
In accordance with University policy, students with disabilities who need accommodations are expected to initiate a meeting with the professor immediately upon registering with Disability Services to discuss how accommodations included on the Special Accommodation Request form will be provided. Students with disabilities who may have special needs and have not requested support services should seek assistance through Disability Services. The Office of Disability Services (ODS) is located in the Human Services Building, room 325, and can be contacted by phone at 468-3004 / 468-1004 (TDD). Failure to request services in a timely manner may delay appropriate accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Acceptable Student Behavior
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.