Introduction to Statistics for Public Administration and Nonprofit Management
PANM 2050-Section 0 (CRN **43094**)

Course Syllabus for **Fall 2014**

Course:	PANM 2050-Section 0 (CRN **43094**)
Title:	Introduction to Statistics for Public Administration and Nonprofit Management
Class Schedule:	Tu-Thurs 09:25 am-10:40 am
Class Location:	801 McCallie Avenue Room 112
Credit:	3 credit hours
Professor:	Charles Hart
Office Location:	417 Fletcher Hall
Office Phone:	(423) 425-4281
Office Hours:	By appointment and Online
E-mail:	Charles-Hart@utc.edu
Text:	Online text book (free) http://onlinestatbook.com/
Blackboard:	This course will use the online course delivery system, Blackboard (utclearn) to communicate, assign, collect, and grade artifacts of this course. As a general education course, this will provide you with a skill set to be more successful in future classes that use Blackboard. If you have problems with accessing your email account, contact the Help Desk at 423/425-4000.

COURSE OBJECTIVES AND CONDUCT

This course meets general education requirements which states that its purpose is to develop the ability to use abstract and deductive reasoning, to think logically and creatively about statistical problems, and to be able to interpret, develop, and use some statistical models of real world and abstract phenomena. This course is designed to introduce the student to the concepts and applications of descriptive and inferential statistics. Students who successfully complete this course will:
-   Understand basic sampling methods and the critical role sampling plays in social research
-   Be aware of the uses and misuses of statistics in politics, advertising, business, and other facets of everyday life.
-   Be able to analyze and present data in the context of real-world problems and issues
-   Know when it is appropriate to apply the statistical techniques presented
-   Know how to use statistical analysis software to analyze data.

COURSE FORMAT

The course will generally follow this sequence: 1. Read or watch material on a topic. 2. Come to class and discuss that topic. 3. Complete an assignment in class related to that topic. By utilizing this flow, you will develop establish a portfolio of effort that I can use to assess your understanding and you can use to study for tests. This process will involve your accessing information on the internet and becoming proficient with a variety of technologies you will discover in class. This process will develop problem-solving and analysis skills using statistical techniques. Statistical analysis software will be used to enable the students to more effectively focus on the statistical concepts and techniques (and their applicability to real world situations).

PANM 2050 is a course on the role of statistical analysis within the fields of human services and health care. Students will have the opportunity to locate, interpret, develop and use statistical models of phenomena as they relate to these fields. Statistical techniques will be practiced and /or demonstrated (such as qualitative, descriptive, correlation and regression analysis, probability concepts and analysis of variance) illustrating how statistics affects our understanding of social phenomena. Topics covered will be as follows:

Introduction to the field of statistics
- Role of statistics (understanding how to organize data in the face of uncertainty)
- Why study statistics?
- Introduction to formal statistical presentation (APA style, Professional journals, and Public Speaking)

Tools used to work with statistics
- UTCLearn the online course delivery system, Blackboard
- Microsoft excel
- Google Drive (Docs) and Google Scholar
- UTC Library

Description and Discovery Using Data
- Foundation concepts for description and discovery using data
- Collecting data and describing a data set (tables, graphs, characteristics of a data set)
- Exploring Central tendencies of the data
- Cross-tabulation, other techniques for data exploration

Problem-Solving and Decision-Making Using Data (Developing a bigger picture)
- Foundation Concepts for decision-making and problem-solving using data (Description vs. inference, population vs. sample, sampling issues)
- Confidence intervals and the power of the statistic (Basic concept and terms)
- Hypothesis development (Focusing the question, Null Hypothesis)
- Hypothesis testing (Concepts and terms, tests for population mean, analysis of variance, chi-square test)
- Accuracy of the Test Statistic (Alpha level, Type I vs Type II error, power)
- Correlation and Regression analysis
- Statistical interpretation and presentation.

EXAMINATIONS
There will be three major grades used to compute the final grade for the class. The portfolio of student work that is submitted during every class period will comprise a third of the final grade. Besides daily classwork, any quizzes or microtests will be part of this score. The midterm score will comprise a third of the final grade and the final score will comprise a third of the final grade. If a student misses an examination without prior approval of the instructor. No make-up exam will be given and a grade of zero will be recorded. Prior approval is the key to being allowed to take a makeup exam unless you have a medical emergency (does not include teeth cleaning or hangovers). Homework may be assigned and will be included in the portfolio score. Due to the nature of in-class discussions, there can be no make-up for missed in-class assignments.

The points for each part of the course requirements will be as follows:

Points

Portfolio	33.3%	<u>Examination 2</u>	<u>33.3%</u>
Examination 1	33.3%	**Total**	**100%**

GRADING SCALE

The grading scale will be no higher than:

90 – 100   A
80 – 89.9   B
70 – 79.9   C
60 – 69.9   D
Below 60   F

A Note on Grading

According to the UT-Chattanooga Undergraduate Catalog:

The instructor of record for each course assigns each student a course grade that indicates the student's academic performance in the course. Course grades may not be changed after the instructor reports the grades to the Records Office except in cases of computational error or for removal of an incomplete. Students may not perform additional work, revise a paper, repeat an exam or complete other assignments after the instructor reports the final grade in order to receive a change of grade.

The student must be enrolled in the course for the semester to receive a grade. Grades can only be issued for work completed during the semester.

The following tables presents grades, their numerical value used for the calculation of GPA, and their relation to student performance.

A— 4 – superior performance in the course.

B— 3 – commendable performance in the essentials of the course.

C— 2 – acceptable performance in the essentials of the course.

D— 1 – marginal performance below the acceptable standards of university work.

F— 0 – unqualified failure and necessity for repeating the course to obtain credit.

COMPUTER USAGE

We will be using Microsoft Excel for data analysis and presentation. In addition to the math/statistics functions in Excel, we will be using the Analysis ToolPak to generate descriptive statistics and perform Correlation/Regression analysis, Analysis of variance and other statistical techniques. **SPSS** statistical analysis software may also be used.

OTHER COMMENTS

1. ADA STATEMENT: Attention: If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Disability Resource Center (DRC) at 425-4006 or come by the office, 102 Frist Hall http://www.utc.edu/Administration/DisabilityResourceCenter/.

2. If you find that personal problems, career indecision, study and time management difficulties, etc. are adversely affecting your successful progress at UTC, please contact the Counseling and

Career Planning Center at 425-4438 or
http://www.utc.edu/Administration/CounselingAndCareerPlanning/.

3. Writing Center: The Writing Center at UTC is a free service offered to all members of the University community. The Center is staffed by peer tutors, graduate students, and English instructors, and offers various services to writers, including tutorials, workshops, and access to resources. Please visit the Writing Center in Holt 119.

4. UTC E-mail: To enhance student services, the University will use your UTC email address (firstname-lastname@mocs.utc.edu) for communications. See http://www.utc.edu/ for your exact address. Please check your UTC email on a regular basis. If you have problems with accessing your email account, contact the Help Desk at 423/425-4000.

5. During the semester, numerous handouts will be distributed or e-mailed to you via Blackboard. *If you miss a class or cannot download a file, you are responsible for obtaining handouts, assignments and other information from your classmates.*

6. Upon registration, all UTC students become subject to the rules and regulations of the Honor Code (see the Student Handbook page 41). The Honor Code is fully enforced in my classes.

7. Feel free to contact me if you have any questions or concerns. Email (Charles-Hart@utc.edu) will be the best way to contact me. [I will try to respond by the following class period] As an adjunct professor, I do not have set office hours, however, after communicating through email, I can try and schedule some time with you to meet and discuss issues.

8. While the textbook is a free online book, here are other recommended books. Do not buy these unless you are actually building your library.

    a. Hinkle, D.E., Wiersma, W., & Jurs, S.G. (2002). *Applied statistics for the behavioral sciences* (5th ed). Wadsworth Publishing.
    b. Gay, L.R., Airasian, P. (2008). *Educational research: Competencies for analysis and applications* (9th Ed.). Prentice Hall.

The Honor Code is based upon the assumption that the student recognizes the fundamental importance of honesty in all dealings within the University community and that education is a cooperative enterprise between student and teacher and between student and student. Any act of dishonesty violates and weakens this relationship and lessens the value of the education that the student is pursuing.

UTC Honor Code Pledge

I pledge that I will neither give nor receive unauthorized aid on any test or assignment. I understand that plagiarism constitutes a serious instance of unauthorized aid. I further pledge that I will exert every effort to insure that the Honor Code is upheld by others and that I will actively support the establishment and continuance of a campus-wide climate of honor and integrity.