



Course Syllabus

<b>Course</b>	<b>HLTH 5100 57 Statistics for Health Administration</b>
<b>Term</b>	Fall I, 2009, Fort Sam Houston, Texas
<b>Instructor</b>	Name: Dr. Christopher L. Pate Phone: 210-592-7727; 210-332-2715 Email: <a href="mailto:cpate29@webster.edu">cpate29@webster.edu</a>
<b>Catalog Description</b>	This course introduces the use of statistical analysis in health administration. The course emphasizes development of the basic methods and underlying concepts of statistics that are used in management decision making and health services research, which include: descriptive statistics, probability sampling, hypothesis testing, forecasting methods, and nonparametric statistics. Statistical applications in epidemiology and health services research are presented.
<b>Prerequisites</b>	None.
<b>Course Level Learning Outcomes</b>	<ul style="list-style-type: none"><li>• The student will be able to contrast descriptive and inferential statistics</li><li>• The student will know when and how to use non-parametric methods</li><li>• The student will be able to test hypotheses</li><li>• The student will be able to evaluate basic research</li><li>• The student will be able to apply statistical methods to management and research questions.</li></ul>
<b>Materials</b>	Title: <i>Basic Statistics for the Health Sciences</i> , 5 <sup>th</sup> edition Authors: J. Kuzma & S. Bohnenblust Publisher: McGraw-Hill. ISBN: 0072844035 or 9780072844030
<b>Grading</b>	Midterm Exam: 25% Final Exam: 35% Course Project: 40%  <b>The GRADUATE catalog provides these guidelines and grading options:</b> <ul style="list-style-type: none"><li>• <b>A/A-</b> Superior graduate work</li><li>• <b>B+/B/B-</b> Satisfactory graduate work</li><li>• <b>C</b> Work that is barely adequate as graduate-level performance</li></ul>

	<ul style="list-style-type: none"> <li>• <b>CR</b> Work that is performed as satisfactory graduate work (B– or better). A grade of "CR" is reserved for courses designated by a department, involving internships, a thesis, practicums, or specified courses.</li> <li>• <b>F</b> Work that is unsatisfactory</li> <li>• <b>I</b> Incomplete work</li> <li>• <b>ZF</b> An incomplete which was not completed within one year of the end of the course. ZF is treated the same as an F or NC for all cases involving G.P.A., academic warning, probation, and dismissal.</li> <li>• <b>IP</b> In progress</li> <li>• <b>NR</b> Not reported</li> <li>• <b>W</b> Withdrawn from the course</li> </ul>
<b>Activities</b>	Lectures, in-class and practical exercises, critique of empirical articles
<b>Course Project</b>	<p>An outside class project is required for this course, which will require use of the techniques and tools presented during the labs and lectures. The project is an individual effort and students may not use submissions from other classes as the basis of this project. The project will contain the following:</p> <ol style="list-style-type: none"> <li>1. Executive summary, not to exceed one page; contains problem statement and results in brief</li> <li>2. Description of study motivation</li> <li>3. Literature review</li> <li>4. Data sources and analytic methods</li> <li>5. Results</li> <li>6. Implications for future research</li> </ol> <p>The study may use data from publicly available sources (e.g., Bureau of Labor Statistics), but studies may not include data involving human subjects. Students will discuss and receive approval on topic proposals with the instructor before beginning work. The project should be no less than 3000 words (approximately 10 pages), excluding data tables and references (11 point, double-spaced). The project must include at least two quantitative variables, and at a minimum, a nonparametric or parametric approach will be utilized to evaluate the chosen variables. The student will explain the logic in selecting the particular analytic method selected. Key milestones:</p> <ol style="list-style-type: none"> <li>1. One page summary due on Week 3 (must include purpose statement, the problem/question you are attempting to address)</li> <li>2. Literature review: Due on Week 6 and provides background of the variables and relationships you are examining; references must include at least 10 peer-reviewed scholarly sources (5 pages)</li> <li>3. Completed project: An electronic submission of the project is due 3 days after the last day of class.</li> </ol> <p>The project must be written in APA style.</p>

<p><b>Policy Statements: University Policies</b></p>	<p>University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest:</p> <p><b>Academic Honesty</b>  The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it.</p> <p><b>Drops and Withdrawals</b>  Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund.</p> <p><b>Special Services</b>  If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided.</p> <p><b>Disturbances</b>  Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course.</p> <p><b>Student Assignments Retained</b>  From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project.</p> <p><b>Contact Hours for this Course</b>  It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.</p>
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<p><b>Course Policies</b></p>	<p>Cheating and plagiarism</p> <p>Of course, students are expected to do their own work. Students who claim that someone else's work is theirs may face disciplinary action.</p> <p>Absenteeism</p> <p>Student's who miss more than one class will have to make up additional work. Student's who miss more than two classes may be advised to drop the course or may have their grade lowered commensurately.</p> <p>This syllabus may be revised or changed without prior notice by the instructor.</p>
<p><b>Weekly Schedule</b></p>	<p>Pre-assignment for Week 1 – None</p> <p>Week 1    Topics: Course Introduction; Introduction to statistics (Chapter 1)</p> <p>                  Assignment for Week 2:</p> <p>                                ▪ Read Chapters 2 - 4</p> <p>Week 2    Topics: Working with data (Chapters 2 – 4)</p> <p>                  Assignment for Week 3:</p> <p>                                ▪ Read Chapter 5</p> <p>Week 3    Topics: Probability (Chapter 5)</p> <p>                  Assignment for Week 4:</p> <p>                                ▪ Read Chapters 6 - 8</p> <p>                                ▪ Project Description due</p> <p>Week 4    Topics: Descriptive statistics (Chapters 6 – 8)</p> <p>                  Assignment for Week 5:</p> <p>                                ▪ Review for Midterm.</p> <p>Week 5 – Midterm Review; Midterm Exam</p> <p>                  Assignment for Week 6:</p> <p>                                ▪ Read Chapters 9 - 11</p> <p>Week 6    Topics: Estimation, Confidence Intervals, Tests of Hypotheses (Chapters 9 – 11)</p>

	<p>Assignment for Week 7:</p> <ul style="list-style-type: none"><li>▪ Read Chapter 13</li><li>▪ Literature Review due</li></ul> <p>Week 7    Topics: Regression Analysis (Chapter 13)</p> <p>Assignment for Week 8:</p> <ul style="list-style-type: none"><li>▪ Read Chapter 14</li></ul> <p>Week 8    Topics: Nonparametric Statistics (Chapter 14); Introduction to Survival Analysis</p> <p>Assignment for Week 9:</p> <ul style="list-style-type: none"><li>▪ Review for final exam</li></ul> <p>Week 9 – Final Review; Final Exam</p>
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