

<b>Course</b>	<b>HLTH 5100: Statistics for Health Administration</b>									
<b>Term</b>	Summer 2009									
<b>Instructor</b>	Chris Wiley 816-721-4861 cwiley@webster.edu									
<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 to use non-parametrics</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>	<ul style="list-style-type: none"> <li>• Required textbook: Sanders, Donald and Smidt, Robert Statistics: A First Course with Data CD, 6<sup>th</sup> Ed., ISBN: 978-0072332179, McGraw Hill Co.</li> </ul> <p>The book may be obtained through MBS Direct Books at 1-800-325-3252 or www.mbsdirect.net.</p> <ul style="list-style-type: none"> <li>• Access to a computer equipped with Microsoft EXCEL</li> </ul>									
<b>Grading</b>	<table border="1"> <tr> <td>Exam 1</td> <td>30%</td> </tr> <tr> <td>Exam 2</td> <td>30%</td> </tr> <tr> <td>Assignments/quizzes/cases</td> <td>40%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </table>	Exam 1	30%	Exam 2	30%	Assignments/quizzes/cases	40%	Total	100%	<p><b>The GRADUATE catalog provides these guidelines and grading options:</b></p> <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> <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> </ul>
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	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>• Attend class. Class attendance is expected.</li> <li>• Students are encouraged to participate actively in class in regard to analysis and discussion or reading material, lecture material, problems and cases.</li> <li>• Class time will be devoted to lecture, discussion, and analysis of assigned problems. Students should complete readings and assigned problems prior to class meetings. Written answers should be prepared for all problems; they will be considered in determining course grades.</li> <li>• This course may have a significant on-line portion. Students may be required to complete some quizzes online as well as other assignments. There may be an active discussion forum available to students to assist each other in the completion of the homework assignments and other course requirements.</li> <li>• Connections will be used for most outside classroom communication. It will also be used to post material used in class.</li> <li>• Students should expect to spend substantial amounts of time, in and out of class, to keep up with readings and assignments. Frequently, there may not be sufficient time review all assigned work and topics in the classroom. However, it is an important learning tool to attempt all tasks, and ask question on any unclear concepts and problems.</li> <li>• Required articles may be distributed in class, be on reserve in the library, or the student may be required to find the article.</li> <li>• Problems/Questions: End-of-chapter problems and questions used to reinforce key concepts.</li> </ul>
<b>Policy Statements: University Policies</b>	<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></p> <p>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</p>

definition of academic dishonesty and potential disciplinary actions associated with it.

### **Drops and Withdrawals**

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.

### **Special Services**

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.

### **Disturbances**

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.

### **Student Assignments Retained**

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.

### **Contact Hours for this Course**

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.

<b>Course Policies</b>	<p>Sometimes circumstances beyond one's control requires that they miss a scheduled class. If necessary, it is the student's responsibility to get any missed lecture notes or handouts. If you are unable to make it to class contact me <b>prior</b> to class. <b>You</b> are responsible for what takes place or is announced in class.</p> <p>This syllabus may be revised or changed without prior notice by the instructor.</p>																		
<b>Weekly Schedule</b>	<table border="0"> <tr> <td data-bbox="440 562 716 594">Class I</td> <td data-bbox="716 562 1399 594">Introduction to statistics, types and uses of statistics. Descriptive Statistics</td> </tr> <tr> <td data-bbox="440 674 716 705">Class II</td> <td data-bbox="716 674 1399 705">Probability and probability distributions.</td> </tr> <tr> <td data-bbox="440 747 716 779">Class III</td> <td data-bbox="716 747 1399 779">Normal Distribution and discrete probability distributions</td> </tr> <tr> <td data-bbox="440 858 716 890">Class IV</td> <td data-bbox="716 858 1399 890">Sampling and confidence intervals</td> </tr> <tr> <td data-bbox="440 932 716 963">Class V</td> <td data-bbox="716 932 1399 963">Mid-term exam, Hypothesis testing</td> </tr> <tr> <td data-bbox="440 1005 716 1037">Class VI</td> <td data-bbox="716 1005 1399 1037">Hypothesis testing continued</td> </tr> <tr> <td data-bbox="440 1079 716 1110">Class VII</td> <td data-bbox="716 1079 1399 1110">Regression analysis and forecasting</td> </tr> <tr> <td data-bbox="440 1152 716 1184">Class VIII</td> <td data-bbox="716 1152 1399 1184">Nonparametric measures, analysis of variance</td> </tr> <tr> <td data-bbox="440 1226 716 1257">Class IX</td> <td data-bbox="716 1226 1399 1257">Course wrap-up and final exam</td> </tr> </table>	Class I	Introduction to statistics, types and uses of statistics. Descriptive Statistics	Class II	Probability and probability distributions.	Class III	Normal Distribution and discrete probability distributions	Class IV	Sampling and confidence intervals	Class V	Mid-term exam, Hypothesis testing	Class VI	Hypothesis testing continued	Class VII	Regression analysis and forecasting	Class VIII	Nonparametric measures, analysis of variance	Class IX	Course wrap-up and final exam
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<b>Additional Information</b>	<p>Each student need a Connections account. Connections will be used for most out-of-the-classroom communication.</p>																		

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