

MATH 108 Fall 2008 Syllabus

Instructor	<p>Dr. Sean Ho twu@seanho.com (604) 513-2121 x3209, Neufeld 5 Office hours: TR 9:30-10:30, MWR 16:00-17:00</p>	<p>Class location: TR 08:00-09:15, Neu 13 math108.seanho.com</p>												
Description	<p>This course is an introduction to applied statistics addressed, in particular, to students specializing in the field of nursing. The focus is on developing the conceptual aspects of the subject rather than the mathematical foundations and assumes no prerequisite except elementary algebra. Topics include descriptive statistics, probability, the normal, t-, chi-square and F-distributions, confidence intervals, hypothesis testing, correlation and regression, ANOVA. Applications are directed towards health and biological studies.</p>													
Objective	<p>By the end of the course students should be able to</p> <ul style="list-style-type: none"> • understand the principles underlying statistical procedures • use the most common statistical tools • demonstrate the use of statistical reasoning in health and biological sciences 													
Prerequisites	<p>A minimum of C in BC Math , Principles of Mathematics 11. Note that credit cannot be obtained for both MATH102 and MATH108. Students with a weak math background or who have not taken a math class for a number of years will need to catch up on their own and perhaps find a private tutor (see TWUSA).</p>													
Textbook	<p>Samuels and Witmer, <i>Statistics for the Life Sciences</i> (3rd ed.), Prentice Hall, 2003. ISBN 0-13-041316-X . This text should be available at the campus bookstore. It is important to use the correct edition; however, we have been using the same edition for the past few years.</p>													
Marking	<p>Letter grade assignment follows the TWU percentage to grade equivalents except that $\geq 85\%$ and $< 95\%$ is an A; 95% and above is an A+.</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Homework</td><td>20%</td><td>Weekly (10 total)</td></tr> <tr> <td>Midterm 1</td><td>20%</td><td>Thu 9 Oct</td></tr> <tr> <td>Midterm 2</td><td>20%</td><td>Thu 6 Nov</td></tr> <tr> <td>Final Exam</td><td>40%</td><td>Tue 9 Dec 9-12am (tent.)</td></tr> </table>		Homework	20%	Weekly (10 total)	Midterm 1	20%	Thu 9 Oct	Midterm 2	20%	Thu 6 Nov	Final Exam	40%	Tue 9 Dec 9-12am (tent.)
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Notes	<ol style="list-style-type: none"> 1. Homeworks are due by the <i>start</i> of class each Thursday. NO LATE HOMEWORKS except for extenuating circumstances. Homework turned in after the start of class up to 5pm on the due date (including coming to class late) will be penalized 10%; after that they will not be accepted and will receive a zero mark. If you cannot come to class to turn in your homework, have a friend hand it in for you or make prior arrangements with the instructor. 2. Note that only a few questions from each homework will actually be marked. 													

	<p>Study groups are encouraged, but the final draft that you hand in must be your own work. All work must be shown for full marks.</p> <p>3. A scientific calculator is required; graphing or special statistical functions are not required. Please have a separate calculator from your cell phone or PDA, since these are not allowed during exams. Sharing of calculators during exams is not permitted.</p> <p>4. During in-class quizzes/exams, all of the following are not permitted and should be left in your closed/zipped bag and put on the floor:</p> <ul style="list-style-type: none">○ Textbooks, notes, cell phones (turn off), laptops, PDAs, <i>electronic dictionaries</i> <p>Your desk should be clear except for your pencil/pen and calculator.</p> <p>5. Students who miss more than 25% of class sessions may be barred from taking the final exam [2008-2009 Academic Calendar p.38].</p> <p>6. In case of inclement weather, the TWU campus conditions will be announced on local radio stations and posted on the TWU website at www.twu.ca/conditions.</p>																					
Academic Integrity and Avoiding Plagiarism at TWU	<p>As Christian scholars pursuing higher education, academic integrity is a core value of the entire TWU community. Students are invited into this scholarly culture and required to abide by the principles of sound academic scholarship at TWU. This includes, but is not limited to, avoiding all forms of plagiarism and cheating in scholarly work. TWU has a strict policy on plagiarism (see academic calendar 2008-09, pp. 37-38). Learning what constitutes plagiarism and avoiding it is the student's responsibility. An excellent resource describing plagiarism and how to avoid it has been prepared by TWU Librarian William Badke and is freely available for download (PPT file) or used as flash (14 minute) (8 minute) tutorials of varying length. http://www.acts.twu.ca/lbr/plagiarism.ppt</p>																					
HW1: First Homework Assignment	<p>This first homework assignment is due next Thursday, 11Sep, at the start of class (8am sharp):</p> <table><tr><th>Sec</th><th>Page</th><th>Questions</th></tr><tr><td>2.1</td><td>p.11</td><td>2.3</td></tr><tr><td>2.3</td><td>p.24</td><td>2.5, 2.6</td></tr><tr><td>2.4</td><td>p.30</td><td>2.20, 2.22, 2.28, 2.29</td></tr><tr><td>2.5</td><td>p.38</td><td>2.33, 2.36</td></tr><tr><td>2.6</td><td>p.48</td><td>2.45</td></tr><tr><td>ch2</td><td>p.66</td><td>2.69, 2.78</td></tr></table>	Sec	Page	Questions	2.1	p.11	2.3	2.3	p.24	2.5, 2.6	2.4	p.30	2.20, 2.22, 2.28, 2.29	2.5	p.38	2.33, 2.36	2.6	p.48	2.45	ch2	p.66	2.69, 2.78
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