Statistics Psychology 270 Fall 2009

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The purpose of this course is to provide background in the ways in which psychologists evaluate data collected from research projects. A researcher may gather many pieces of data that describe a group of research subjects and there are common ways in which these pieces of information are presented. Secondly, statistical tests can help investigators draw inferences about the relationship of the research sample to the general population it is supposed to represent. As a student of psychology or any other discipline that uses research data to explore ideas, it is important that you know how data is evaluated and that you gain an understanding of the ways in which these procedures help to summarize and clarify data.

TEXT:

Gravetter, F.J & Wallnau, L.B. (2009) *Statistics for the Behavioral Sciences* Belmont CA: Thompson Learning/Wadsworth

REQUIREMENTS:

5 quizzes 3	60 - 40 pts each	60 % total
10 homework assignment	s 6 pts each	20 % total
8 computer lab reports	7 pts each	20 % total

Five quizzes are scheduled throughout the semester. Questions will be drawn from material covered since the previous quiz. There will be two forms of each quiz. You may choose to take the one provided during the class time. If you are satisfied with the grade you will be ready to move on. If you are not satisfied with your performance you can choose to take second form of the quiz. If you take both forms of a quiz I will use the higher of the two scores when computing your grade. Alternatively, you may feel that you are not ready to take a quiz when it is offered in class. In this case you will take only the second form of the quiz for your grade (sacrificing the possibility of a retake). In any case, if you choose to take the second form of the quiz it must be done no more than two weeks following the in class form. Times for the second form will be arranged with me outside of class time.

Ten homework assignments will be passed out throughout the semester. The questions on each homework assignment correspond to the work covered on a specific quiz. There are two homework assignments for each quiz and the quiz that the assignment

corresponds to is identified on the homework sheet. Homework assignments are graded and **must be turned in when you take the quiz that the homework covers.** If you turn it in "early" – a class period before you take the quiz, I will grade it and allow you to correct it for a higher grade.

A computer lab accompanies the lecture portion of this course. This lab is included to help you feel more comfortable using computer software and to give you a chance to apply the statistical tests you are learning about in lecture to actual data. We will be using SPSS for windows. This is a statistical software package that is used by many researchers in the social sciences. It is available in all of the computer labs in Healy library. I will devote most of the lecture on Sept. 16th to an overview of this software. Following this introductory lecture, the very next class (Friday, Sept. 18th) I will be in the psych department computer lab space (M/2/628) from 9:30 - 12:00 to assist any student with the first computer lab. After this date the computer portion of the course will be discussed in class but done with the aid of handouts in the computer labs (Healy Library) at times that are convenient to you. Lab reports and printouts from the lab must be handed in for grading on the day indicated on each lab handout. Lab reports will be graded on a pass/fail basis. If your lab report does not meet a passing standard you will be asked to re-submit it. A date by which it must be re-submitted will be written on the lab report. Please note that the grade for any lab remains a 0 until it receives a passing grade.

There will be one additional brief assignment dealing with frequency distributions that will be handed out in class on Sept. 11th. This will be worth 4 pts.

GRADING SUMMARY:

I grade on a point system. Over the semester there will be 300 points total. At any time during the semester you can determine your current grade by adding up your accumulated points and dividing by the total number of points available at that time. The 300 points are broken down as follows:

180 points: the five quizzes. If both forms of the quiz have been taken I will use the **higher** of the two grades.

60 points: the ten homework assignments, 6 points each.

60 points: the computer labs plus the frequency distribution worksheet. Each of the eight labs is worth 7 points. The frequency distribution worksheet is worth 4 points. The whole of these points is earned once a lab is graded satisfactory. No points are awarded until then.

POLICIES:

Incompletes: Incompletes are meant to be used in cases of extreme medical or personal emergency. These are the only situations in which I will even consider granting an incomplete. If a situation of this type should arise I would need to be contacted as soon as possible so that a contract could be negotiated to outline what work would need to be

finished and in what time frame. I reserve the right to ask for documentation of the emergency should the need arise.

Academic Difficulties: The University does provide academic support for students who are in need of advising and/or tutoring. I can help direct you to these services or Academic Support. In accordance with Section 503 and 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 the University of Massachusetts Boston attempts to accommodate all students with a documented disability. Through the Ross Center for Disability Services various aids such as sign language interpreting, readers, testing accommodations, etc. are available to students. If you believe that you require such services, you should contact the Ross Center on the upper level of the Campus Center, Rm 211 (287-7430) as soon as possible.

Academic Honesty: It is assumed that in this class each student and I will act in a professional and honest manner. Therefore, any student who engages in an act of Academic Dishonesty, plagiarizing a paper (copying from any source without quotes and referencing is plagiarizing), etc., will receive a failing grade for that assignment/test and in most cases a failing grade for the course. Please review the sections on Academic Standards, Cheating, and Plagiarism (pg. 333 - 334) and sections VI and VII of the Code of Student Conduct (pg 336 - 340) in the University Undergraduate Catalog 2007-2009 or at http://www.umb.edu/student_services/student_rights/code_conduct.html. If you still have questions about Academic Honesty or expectations in this course see me well prior to the due date of the assignment.

FINAL COMMENTS:

This brings me to a few comments that I hope will be helpful.

- 1. <u>Come to class.</u> Hopefully I can be helpful. There is always a temptation to miss classes. Don't do this. If you get behind it's difficult to catch up.
- 2. <u>Work problems.</u> There are problems in your text in addition to the ones I will give for homework. I also provide extra problems at various points in the semester for additional practice.
- 3. <u>Please ask questions.</u> I can only give additional information or explanation if I know where to give it. It is <u>your</u> responsibility to let me know that you are confused. Ask during class or talk to me during my office hours or e-mail me a question. Don't wait in hopes that the confusion will clear, on its own, with time!
- 4. <u>Don't procrastinate, please!</u> The flexibility in the schedule is there to assist you, not allow you to wait until later. Statistics is a subject that builds on previous knowledge so that if you wait until later you might find yourself working twice as hard to understand.

5. Finally, <u>don't give up</u>. Statistics can sometimes be an a-ha experience. By this I mean that you can be very much in the dark and feel that you are making no progress and then suddenly the pieces fall into place. If you experience that "in the dark" feeling, don't give up. Keep asking questions and working out examples.

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