PSY 315
BEHAVIORAL SCIENCE STATISTICS
Summer Evening 1999 Session

Instructor:	Marie J Burghardt, MSCP	Time:	Thursdays 5:30 – 9:30
		Place:	Tripler
Phone:	621-1159	e-mail	Mjbnoto@hotmail.com

Course Overview: The focus of this course is on understanding basic statistical topics in social science research. Topics which will be covered include: frequency distributions, graphical representations, measures of central tendency, variability, normal curve, derived scores, correlation, regression, statistical inference, and various hypothesis tests including t-tests and chi-square tests.

***Course Objectives*:**

1. Student will be able to demonstrate an understudying of descriptive statistics and inferential statistics.
2. Student will be able to demonstrate an understudying of statistical tables.
3. Student will be able to demonstrate an understudying of central tendency.
4. Student will be able to demonstrate an understudying of how to utilize statistical formula.
5. Student will be able to demonstrate an understudying of standard scores.
6. Student will be able to demonstrate an understudying of correlation.
7. Student will be able to demonstrate an understudying of *t*-test.
8. Student will be able to demonstrate an understudying of regression.
9. Student will be able to demonstrate an understudying of ANOVA.
10. Student will be able to demonstrate an understudying of hypothesis testing in a research context.

Textbooks: **The *required* text is:**

Frederick J Gravetter, Larry B. Wallnau (l999). *Essentials of Statistics for the Behavioral Sciences 3rd Ed.* CA: Brooks/Cole.

Exams: There will be one midterm exam and one final exam. Each exam will consist of problem solving. The exams will be similar in format to the exercise sets. The exams will basically cover each of the learning objectives as stated on the handouts. EXAMS ARE OPEN BOOK. You will be able to use your calculator, class notes, and your textbook.

Calculator: To do most of the exercise sets and exams you will need a calculator (a small hand calculator, we're not talking mainframe here.) Keep in mind that this course does not require sophisticated mathematics! Just make sure that your calculator has a memory for storing numbers, a "square" key (to square number) and a square root key.

***Course Requirements*:**

IN ORDER TO RECEIVE CREDIT FOR QUIZES, YOU MUST BE IN CLASS THE DAY THE QUIZ IS DUE.
Five (5) points will be added to you grade for each class session attended. In order to receive points for class attendance, you must be present at the beginning of class and remain for the duration of class.

Grading: **Your grade will be determined by your performance on your exams and your quizzes using the following criteria. There will be 9 quizzes, each worth 10 points, for a possible total of 90 points.**

The total possible points for each exam is:

Exam 1	**100 pts**
Quizzes	**90 pts**
Final	**100 pts**

Thus, the total number of points possible is 290. Grades will be assigned as follows:

Point Range	Grade
261-290	**A**
232-260	**B**
203-231	**C**
174-202	**D**
Below 174	**F**

Lectures: **At each lecture students usually will receive QUIZES covering the lecture material. Occasionally I will handout discussion exercises, self-tests and concept maps to enhance understanding.**

Study Groups **I encourage you, if it is at all possible, to form your own study group. Sharing questions and hearing others describe concepts will often times facilitate studying. (Besides there is the old adage about "misery loves company".)**

COURSE SCEDUALE (tentative)

Week	**Topic**	**Reading Assignment**
1	Introduction, Preliminary concepts, Frequency distribution Quiz 1	Chapters 1 & 2
2	Measures of central tendency Measures of Variability Graphical representations Quiz 2	Chapters 3 & 4
3	z-Scores: Location of scores & standard distributions Probability Quiz 3	Chapters 5 & 6
4	Probability & Samples: Distribution of sample means Intro. to hypothesis testing Quiz 4	Chapters 7 & 8
5	MIDTERM Into to the *t* statistic Quiz 5	Chapter 9
6	Hypothesis testing with two related samples Estimation Quiz 6	Chapters 11 & 12
7	Intro. to ANOVA Two-factor analysis of variance (independent measures) Quiz 7	Chapters 13 & 14
8	Correlation & regression Quiz 8	Chapter 15
9	Chi-square Quiz 9	Chapter 16
10	FINAL	