Course Overview
Statistics plays an integral role in interpreting the results of research. You should exit this course knowing how and when to compute descriptive statistics (e.g., mean, variance, z-score, and correlation), and, how and when to compute inferential statistics (e.g., t-tests, ANOVA) to test hypotheses.

Catalog Description of Course
The logic and methods of descriptive and inferential statistics and their relation to experimental design in psychology are studied.

Requirements
1) The textbook listed in the margin.
2) A calculator and access to Excel.
3) Access to either the new version of SPSS (called PASW) or an older version of SPSS. One of these is available in Henderson 214 (Psychology department computer lab) and another version is available on library computers (and many academic libraries and computer labs have some version of SPSS). Do keep in mind that many versions of SPSS are not backward-compatible, so you must be very careful when saving/exporting your work. For data files, just save as the default .sav file, which should be accessible in any version of SPSS. However, for output files, the story is different. You must always export these files rather than simply saving them; all output files should be exported as .rtf or .pdf.

Homework Assignments
There will be twelve homework assignments during the semester. These assignments are designed to increase your understanding of the topics being covered and give you the opportunity to apply course material to real-world situations.

Quizzes
It is helpful for you to review the material presented in this course. To “encourage” that behavior, you will be required to complete 12 quizzes. These will be due on the days indicated in the schedule of topics listed below.
Grades will be calculated as follows:

- A: 89.5 - 100%
- B: 79.5 – 89.4%
- C: 69.5 – 79.4%
- D: 59.5 – 69.4%
- F: below 59.5%

There will be NO rounding in this course!

EXAMS
There will be four exams. Exams will be cumulative. On each exam, there will be questions relating to material covered on the previous exam(s). The questions will require not only recognition of concepts and correct answers, but will be designed to test comprehension and application of concepts as well. Material for the exams will be drawn from the text, and the lectures. There will be no make-up exams except as mandated by University policy for University-excused absences, religious holidays and major illnesses. Students should contact the professor prior to the scheduled exam if possible, or within 24 hours of missing the exam due to accident or illness, to schedule a makeup exam.

Note: Unless specifically approved by me prior to the exam, use of electronic devices (e.g., cell phones, PDAs, iPods, and the like) during the exam is strictly prohibited and will result in your exam being taken from you immediately.

CLASS ATTENDANCE
Attendance in this course is mandatory and will account for 10% of your grade. There will be class demonstrations, discussions, and films designed to enrich your learning experience. And further, the text for this course is thick with information: coming to class will help clarify concepts and focus your studying. Each student will be allowed 3 unexcused absences; if you have more than 3 unexcused absences you will receive no credit for attendance. All absences will be considered unexcused except as mandated by University policy for University-excused absences, religious holidays and major illnesses.

RESEARCH PARTICIPATION
As part of your course requirement, you will need to complete a total of 6 credit hours of research participation. HOWEVER, if you do not have any unexcused no-shows (i.e. you do not show up for a study) you will be required to complete only 4 credit hours. Students who complete have completed their required credit hours will be allowed to complete an additional credit hours for extra credit (not to exceed 10 total credit hours).

Failure to complete the required number of credits will result in the reduction of your final grade by one letter grade. That is, if you have an “A” and do not complete the required credits, your final grade will be a “B.”

You will be able to sign up for various studies through the SONA system. Instructions on how to do this will be provided
in a separate handout. Studies are worth different amounts of credit depending upon how long it takes to complete the study. You may sign up for any combination of studies you wish as long as you complete the required number of credits.

A pre-screening questionnaire is required before participating in many of the studies. You may earn .5 credits by completing the pre-screening within the first two weeks of the semester.

The alternative to the research experiment participation will be to complete an original 10-page research project, as specified by your instructor. If you choose to do the research project instead of the research experiments, you must make an appointment and meet individually with the instructor prior to Friday, September 14, 2012, and the written project will be due by Thursday, December 6, 2012, in class.

GENERAL SUGGESTIONS AND CLASS GUIDELINES
This syllabus and course description is provided as a general guideline to assist in your planning. Various circumstances may result in changes to the syllabus or course schedule, and such changes are at the instructor's discretion. A reasonable attempt will be made to communicate such changes to students in advance; however, it is the student's responsibility to keep up with such changes.

Students with Disabilities:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library
Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
StudentDisabilityServices@tamuc.edu

EMAIL POLICY
If you email me and do not receive an email response within 48 hours, most likely, your email was not received. I will respond
to all emails within **48 hours on weekdays**.

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See Student’s Guide Handbook, Policies and Procedures, Conduct).

**Officially Withdrawling from the Course**
Students are responsible for officially withdrawing themselves from the course; failure to do so will result in a performance grade of “F”. The last day to officially withdraw to qualify for a grade of Q is November 1st, 2012.
# Psychological Statistics

**PSY 302 - 002  Fall 2012 Dr. Maria Carlson**

## SCHEDULE OF TOPICS AND EXAMS

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th><strong>TUESDAY</strong></th>
<th><strong>THURSDAY</strong></th>
<th><strong>LAB</strong></th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>8/28 &amp; 8/30</td>
<td>Introduction and Syllabus</td>
<td>Chapter 1: Introduction to Statistics Quiz 1 Due</td>
<td>Appendix A: Basic Mathematics Review</td>
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<tr>
<td>2</td>
<td>9/4 &amp; 9/6</td>
<td>Chapter 1, Cont.</td>
<td>Chapter 2: Frequency Distributions Quiz 2 Due</td>
<td>Basics of SPSS and Excel</td>
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<tr>
<td>3</td>
<td>9/11 &amp; 9/13</td>
<td>Boxplots</td>
<td>Chapter 3: Central Tendency Quiz 3 Due</td>
<td>Creating Graphs using Excel and SPSS Homework 1 Due</td>
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<tr>
<td>4</td>
<td>9/18 &amp; 9/20</td>
<td>Chapter 4: Variability</td>
<td>Exam Review</td>
<td>Descriptive Statistics using Excel and SPSS Homework 2 Due</td>
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<tr>
<td>5</td>
<td>9/25 &amp; 9/27</td>
<td>Exam 1 Due</td>
<td>Chapter 5: Standardized Scores</td>
<td>Standardized Scores Homework 3 Due</td>
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<td>6</td>
<td>10/2 &amp; 10/4</td>
<td>Chapter 5: Standardized Distributions Quiz 4 Due</td>
<td>Chapter 6: Probability</td>
<td>Probability Homework 4 Due</td>
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<td>7</td>
<td>10/9 &amp; 10/11</td>
<td>Chapter 7: Sampling Distributions Quiz 5 Due</td>
<td>Exam Review</td>
<td>Sampling Distributions</td>
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<td>8</td>
<td>10/16 &amp; 10/18</td>
<td>Exam 2 Due</td>
<td>Chapter 8: Introduction to Hypothesis Testing</td>
<td>Testing Hypotheses using SPSS Homework 5 Due</td>
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<tr>
<td>Week</td>
<td>Dates</td>
<td>Chapter 8, Cont.</td>
<td>Chapter 9: The t Statistic Quiz 6 Due</td>
<td>Comparing Two Groups using SPSS Homework 6 Due</td>
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<td>10</td>
<td>10/30 &amp; 11/11</td>
<td>Chapter 10: Two Independent Samples t Test Quiz 7 Due</td>
<td>Chapter 11: Two Dependent Samples t</td>
<td>Comparing Two Groups using SPSS, Cont. Homework 7 Due</td>
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<td>11</td>
<td>11/6 &amp; 11/8</td>
<td>Chapter 12: Estimation Quiz 8 Due</td>
<td>Exam Review</td>
<td>Confidence Intervals and Estimation using SPSS Homework 8 Due</td>
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<td>12</td>
<td>11/13 &amp; 11/15</td>
<td>Exam 3 Due</td>
<td>Test Chapter 15: Correlation</td>
<td>Correlation &amp; Scatterplots using SPSS Homework 9 Due</td>
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<td>13</td>
<td>11/20 &amp; 11/22</td>
<td>Chapter 15: Regression Quiz 9 Due</td>
<td>NO CLASS – Thanksgiving Break</td>
<td>NO LAB – Thanksgiving Break</td>
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<td>15</td>
<td>12/3 &amp; 12/5</td>
<td>Chapter 13: Post Hoc Tests Quiz 11 Due</td>
<td>Chapter 14: Two-Factor ANOVA</td>
<td>Multiple Comparison Procedures using SPSS Homework 11 Due</td>
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<td>16</td>
<td>12/10 &amp; 12/12</td>
<td>Chapter 14: Post Hoc Tests Quiz 12 Due</td>
<td>Exam Review</td>
<td>Factorial ANOVA using SPSS Homework 12 Due</td>
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