STATISTICS
PSYCHOLOGY 343
CRN 12245
FALL 2013

Instructor: Dr. Ronald Pavone
Office: 1022A BSB; Mailbox: 1009 BSB; e-mail: rpavone@uic.edu
Lecture Hours: 9:30 - 10:45, Tuesday and Thursday, in Lecture Center F6
All Discussion Sections are on Friday in 2019 BSB
Office Hours: Monday 3:00 - 4:00 & Tuesday 3:45 - 5:00; and by appointment
Teaching Assistant: TBA; Office: TBA; e-mail: TBA
Office Hours: TBA, and by appointment
Texts: Statistical Applications for the Behavioral Sciences, by L. Grimm
The Student Study Guide and Workbook, by J. Britt and L. Grimm

Goals and Objectives: The purpose of this course is to help you develop college
level descriptive and inferential statistical skills. You will learn to conceptually
understand, and to concretely apply, statistical procedures in the context of
research data in the behavioral sciences. As you exercise and build these skills,
you will be laying a foundation to better understand psychological literature and
analyze data. In addition, this course is intended to help you strengthen your
logical problem-solving and decision-making abilities to think more precisely,
systematically, and critically.

We will cover a great deal of material in the next 16 weeks. This material is
cumulative, with each new topic building on your understanding of the
information that preceded it. Therefore, it is essential that you keep up with the
readings and that you complete your weekly Homework Exercises. You are
strongly recommended to maintain excellent class attendance, and to already
have read each week's chapter, before you come to class. In addition, each
week a Homework Assignment will be due and will be graded.

Your final grade will be based on four tests, and on your weekly homework
exercises. Total homework points will contribute 20% to your final grade, and
each test also will contribute 20%. You will take your first three tests in Weeks
4, 8, and 13, and you will take your fourth test during Finals Week. Like the first
three tests, the fourth test will cover specific chapters only since the most
recent test. Thus, there will be no comprehensive final exam, at least in the usual
sense of the term. However, as noted above, remember that the material you
learn in Statistics will be foundational in nature, with new material systematically
building on what has come before. In an important sense, then, your final test
indeed will be "cumulative". Out of the total points possible during the semester,
if you earn 90% you will get an "A"; 80% = "B"; 70% = "C"; 60% = "D".

Late Homework Assignments will not be accepted, and the policy for missed
tests is as follows. If you must miss a test, a more difficult makeup test will be
given. Makeup tests will have extra questions that will count against your grade
if they are missed, but they will not add to your grade if they are answered
correctly. For your weekly exercise assignments and for your tests, use only
traditional calculators without graphics, cell phones, or programmability.

Prerequisites: PSCH 242 and ENGL 161 with a minimum grades of C; MATH118
(or the equivalent) with a minimum grade of C or MATH 090; or consent of the
instructor. For Psychology or Neuroscience Major status only. Students who do
not have prerequisites will be dropped from the course.
**Statistics**  
**Psychology 343**  
**Fall 2013**  
**Course Schedule**

<table>
<thead>
<tr>
<th>Week Beginning</th>
<th>Topic</th>
<th>Assignment</th>
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</thead>
<tbody>
<tr>
<td>8/26</td>
<td>Measurement and Displaying Data</td>
<td>Ch. 2</td>
</tr>
<tr>
<td>9/2</td>
<td>Central Tendency</td>
<td>Ch. 3</td>
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<tr>
<td>9/9</td>
<td>Central Tendency (con’d) and Variability</td>
<td>Ch. 3, Ch. 4 [skip 56-58]</td>
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</tbody>
</table>
| 9/16           | **Test One** on Monday  
The Normal Curve and z-Scores | Ch. 5       |
| 9/23           | Sampling Distributions            | Ch. 6       |
| 9/30           | “Hypothesis Testing” with         | Ch. 7       |
|                | Single Sample z-Test & Single Sample t-Test |          |
| 10/7           | Two Independent Samples t-Test    | Ch. 8       |
| 10/14          | **Test Two** on Monday  
The Chi-Square Test | Ch. 17      |
| 10/21          | One-Way Analysis of Variance      | Ch. 12      |
| 10/28          | One-Way ANOVA [con’d]             | Ch. 12      |
|                | Two-Way Analysis of Variance      | Ch. 13      |
|                | Statistics Projects               |             |
| 11/4           | Two-Way ANOVA [con’d]             | Ch. 13      |
| 11/11          | **Test Three** on Monday          |             |
|                | Correlation                       | Ch. 15      |
| 11/18          | Regression                        | Ch. 16      |
| 11/25          | Integrating What You Have Learned:| Chapter     |
| 12/2           | The General Linear Model          | Handout     |
| 12/9           | **Final Exam Week**               |             |

[Any changes to be announced in class and are the responsibility of the Student]

Weekly Discussion Section Homework Assignments: In each of your Weekly Discussion Sections, Homework Exercises will be due for grading. The Homework Exercises are found in The Student Study Guide and Workbook, at the end of each chapter. For each chapter and for each week, do ALL of the exercises. Your Homework Exercises are extremely important. They will provide you with consistent opportunities to systematically exercise your statistical knowledge. Through your weekly homework exercises, you will build points toward a full 20% of your final grade. You must show your work to earn your credit. It will be to your great benefit to invest considerable care and effort toward mastering the concepts and the processes illustrated by your Statistics Homework Exercises.

Students with Disabilities: If you require accommodations for access and participation in this course, you must register with the Office of Disabilities Services (ODS). Please contact ODS at 312/413-2183 (voice) or 312/0123 (TTY).