

STATISTICS IN PSYCHOLOGY

Weber State University

Psychology 3600, Fall 2008

Class Times: Monday, Wednesday, and Friday 10:00 - 10:50 a.m. in SS 378

Professor: Azenett A. Garza, Ph.D.
Office & Office Hours: SS 328D - M & W 11:00 a.m. to noon. or by appointment
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Web CT <http://vista.weber.edu> will need Wildcat username and
password to access.
Volunteer Student Instructor: Nicole Nordello, NicoleNordello@mail.weber.edu

Texts: -Statistics for Psychology, 4th ed. By Arthur Aron, & Elaine Aron. Prentice Hall.
-How to Use SPSS: A Step by Step Guide for Analysis & Interpretation by Brian Cronk, 4th
ed., Pyrczak Publishing.
- Workbook & Study Guide for Statistics (To be purchased at the bookstore).

Learning Objectives

1. The ability to understand and explain to others the statistical analyses in reports of psychological research.
2. A preparation for more advanced course in statistical methods.
3. The ability to identify the appropriate statistical procedure for many basic research situations and to carry out the necessary computations.
4. Further development of your quantitative and analytic thinking skills.
5. The ability to use SPSS to conduct statistical analysis.

Methods of learning and preparing for this class.

1. Reading the assigned material, which includes following the numeric examples closely writing down questions about anything not entirely clear to you. Reading statistics requires close study and rereading, not just reading through once as you might an ordinary book.
2. Testing your knowledge and reviewing each lecture using the Practice Set II problems or the ones in your workbook.
3. Completing the assigned practice problems. Statistics is a skill-it is necessary to DO statistics, not just read and understand.
4. Attending lectures, listening closely, asking questions- be sure to have done the reading *first*. DON'T fall behind!
5. Studying for, taking, and reviewing answers for exams.

Knowledge of mathematics:

The course does not emphasize mathematics. There will be many calculations, but these require nothing more than elementary high-school algebra. The emphasis, instead, is on understanding the LOGIC of the statistical methods. The most important part of each exam will be either (a) a problem in which you use a statistical procedure to analyze the results of a study and then write an essay explaining what you have done to someone who has no knowledge of statistics or (b) a problem in which you are presented with the results of a study and must explain what they mean to a person who has never had a course in statistics.

Calculators

I strongly encourage you to use a hand calculator for doing your assignments, and I will permit calculators during tests, I would much prefer you to spend your time developing an understanding of the statistical concepts rather than adding and dividing numbers. A simple calculator that adds, subtracts, divides, multiplies, and takes square roots should be of great help. Since you must show your work on all assignments and exams, calculators that also do statistical calculations will not be of much help, so don't feel any pressure to spend a lot of money. About \$15 or less should do.

Evaluation of Course Work

Exams: There will be a total of five exams. Each exam will consist of multiple choice, fill-in-the-blank, short essay questions, and or computational problems. Each test will be worth 100 points toward your final grade. Bring a #2 pencil to each test. You will be required to purchase a scantron for each exam. **MAKE-UP EXAMS ARE NOT ALLOWED. A missed exam counts as a zero. Those who provide a *written* medical excuse can drop that exam (but only a total of one exam can be dropped). Most other excuses will not be accepted.** IF you know of a conflict with the exam schedule, you may take ANY exam early. However, no exam may be taken late. Early exams will be permitted if advanced notice is given. If you miss an exam, you must take a final exam to replace your missing test score. The final exam will be comprehensive (that means it will cover material from the entire course). You have 3 days for each exam, and you are responsible for knowing the testing center hours. They will NOT let you arrive or stay late to take an exam. Please schedule your time wisely! Also, you may replace your lowest exam score by taking the final exam. So if you DO better on the final exam, your lowest score will be replaced by your final exam score. If you miss more than one exam, remember that only one exam grade will be replaced by the final exam score and your second missed exam will receive a 0! Exam questions will be taken from the textbooks and the lecture. You will be responsible for all material covered during the semester regardless of its source. All exams will be taken in a Weber State University Testing Center. You will have 3 days to take each exam (you will have 4 days for the final exam). Testing Center hours are provided below (next page). The Social Science Testing Center is located in the Social Science Building room 38.

Monday - Thursday	7:30 AM - 8:00 PM (Must show up by 7:00 PM to take an exam)
Friday	7:30 AM - 4:30 PM (Must show up by 3:30 PM to take an exam)
Saturday	9:00 AM - 4:30 PM (Must show up by 3:30 PM to take an exam)

Attendance, Participation & In-Class Work: Class participation and discussion will occur on a regular basis. In addition, there will be MANY class exercises and if you are present and participate, you will get credit for your participation. You may miss 2 of these days without penalty. Additional missed days and class assignments will receive 0s. Each day of participation and assignment will be worth 5 points.

Class & Homework Assignments: There will be class/homework exercises given through out the semester. These assignments are included in the workbook and study guide required for this class and are labeled multiple choice and practice problems. Although there will be class time devoted to working on some of these assignments, you will be responsible for completing the rest of the assignment at home before the next class period. ALL assignments must be completed by the start of the final exam to pass the course. Assignments are due at the start of each class. Assignments turned in between 5 minutes and 24 hours after they are due are 1/2 late. Two late assignments will be allowed without penalty. For each additional late assignment you must write a short paper summarizing in your own words the statistical conclusions of a research article assigned by me. (It is your responsibility to arrange any such make-ups in time to complete them by the start of the final exam).

Late assignments will be penalized 2 points for each day they are late (weekends count as two days, Sat. & Sun.) The two lowest score will be dropped. Each assignment will be worth 25 points.

SPSS Assignments: There will be 9 assignments that will require running a statistical analysis of some sort on SPSS and verbally describing the results. These assignments will be due at the beginning of class on their specified due dates. Due dates are listed on the class calendar. You may miss 1 of these assignments without penalty. Each assignment will be worth 15 points. Late assignments will be penalized 2 points for each date they are late (weekends count as two days, Sat. & Sun.). Late assignments are better than no assignments.

Extra Credit Options: Please see additional handouts for extra credit option. All extra credit options must be completed by Nov. 24th. No late EXTRA CREDIT will be accepted under any circumstances. Please try to do your best under all circumstances and don't rely on extra credit to save your grade.

Student Disability Weber State University is committed to equal opportunity in education for all students, including those with documented physical disabilities or documented learning disabilities. Weber State University policy states that it is the responsibility of students to contact Services for Students with Disabilities (SSD) in room 181 of the Student Service Center. SSD can also arrange to provide course materials (including this syllabus) in alternative formats if necessary. The instructor will meet with the student and staff members of the SSD to formulate a written plan for appropriate accommodations, if required.

Calculation of Grades

5 Exams	(100 pts. ea.)	66% of your grade
Class/Homework	(25 pts. ea.)	15% of your grade
8 SPSS Assignments	(15 pts. ea.)	15% of your grade
Attendance & Participation	(5 pts. ea.)	4% of your grade

Final Grade

A	93-100%
A-	90-92%
B+	83-89%
B-	80-82%
C+	73-79%

Final Grade

C-	70-72%
D+	63-69%
D-	60-62%
E	0-59%

Final Grades: Please note that due to the policy in which assignments are dropped in most of the categories, extra credit options are available and extra points are usually awarded in exams, final grades are not "rounded up or curved". Meaning that if you have an 89.9 in the class, you will not be rounded up to an A-, rather you will receive a B+. In the **ONLY** circumstance in which a grade will be rounded is if **ALL** assignments and exams have been completed.

Grade Appeals: *If, after receiving an exam or homework back during class, you think a question is open to more than one interpretation, please do not ask about this during class. Write down on a sheet of paper your challenge to me. The challenge must be submitted within a week after the exam and must explain how the question could be interpreted so that one of the other answers (the one you chose) would be as "correct" as my answer. I will return the challenges with comments either accepting or rejecting the challenge. I encourage you to utilize this option if you feel strongly about a test question. Your challenge must include the following (if any of these components are missing, your challenge will automatically receive no credit): 1) your name 2) your exam with answer sheet 3) the*

number of the question that you are challenging and what the question is generally asking 4) the CORRECT answer (according to me) 5) YOUR answer, and 6) why YOUR answer is as "correct" as the CORRECT answer. NOTE: Good challenges include citations from lecture notes, text (with page numbers), or assigned articles. Challenge points are almost never given for arguments based on your own life experience, on the simple assertion that your answer is correct, etc. THIS IS THE ONLY WAY that your concerns will be addressed. ONLY written questions and comments THAT YOU SUPPORT will be evaluated.

Class Attendance: Please note that attendance will be officially taken every class and an excessive number of unexcused absences will result in a lower grade. Class and some homework assignments are given during class. Also remember that tests will cover both reading and lecture material and lectures might often cover material not found in the book. Material to be covered is likely to change. Therefore, it is to the benefit of the student to attend class everyday.

Excused Absences for University-Recognized Activities. "Students who will be absent while representing the University in officially recognized University activities (sports, band, professional conferences, etc.) must notify the instructor ten days prior to absence. Students will be permitted to make up both assignments and examinations in consultation with their instructors

Class Contact: At times it is necessary to miss a part or all of class. When this happens, it is helpful to have the name and number of another student in the class you can call to answer any questions you may have about any information missed, etc. Please use the space below to write down the name, email, and phone number of at least one student in this class who you can contact:

CLASS DISRUPTIONS

Students in this course have the right to participate in lecture sessions that are relatively free of any unnecessary noises or other distractions that could impair their ability to take good lecture notes. For this reason, all students attending class will be expected to refrain from the following:

Chronic Tardiness. Students who anticipate being late for class on a regular basis should see me at the beginning of the semester to explain why they will be late. They also should plan to sit in an area of the classroom that will lead to the least amount of class disruption when they arrive. Students who are chronically late (4 or more times) but fail to discuss the problem with me can expect to receive a final grade in the class that is one letter grade lower than is indicated by their total point accumulation in the course.

Early Departures. Students who must leave a class early should discuss their plans with me before the beginning of the class period. Students who expect to make many such departures should talk to me about their plan at the beginning of the semester. Students who depart early from class on a regular basis without permission will be penalized in the same manner as indicated for chronic tardiness.

Inappropriate Behavior. Students engaging in horseplay or disruptive, lecture-irrelevant conversations during a class period will be given up to two warnings to stop their behavior. Following the second warning, disruptive students will be asked to leave the classroom after each additional incident. A petition will be submitted to the Dean's office to drop the disruptive students from the class roster after the second class dismissal. Those dropped from the roster may receive a grade of "F".

Electronic Gadgetry. Students are expected to deactivate all beepers, cellular phones, and watch alarms while class is in session. Any students who disrupts the class more than 2 times during the semester because of these devices will be asked to leave the classroom after each subsequent incident. No walkmans or other portable headsets may be worn while class is in session. Tape recorders are permitted in lecture; however, care should be taken to not disrupt class while changing tapes.

Academic Dishonesty

PLAGIARISM AND CHEATING

"Plagiarism" means the intentional unacknowledged use or incorporation of any other person's work in, or as a basis for, one's own work offered for academic consideration or credit or for public presentation. Plagiarism includes, but is not limited to, representing as one's own, without attribution, any other individual's words, phrasing, ideas, sequence of ideas, information or any other mode or content of expression. Plagiarism includes purchased or borrowed papers. If you include verbatim text in one of your homework assignments, you must quote the original source. You must put the text in quotes and give the specific citation for the questions. Consider the following hypothetical response as an example.

Contrary to Plato and Descartes who assumed that knowledge and ideas are innate or inborn, Locke proposed that the mind is a "blank slate...on which experience writes" (Meyers, 2003, p. 4). This notion helped lay the foundation for empiricism, or "the view that knowledge originates in experience and that science should, therefore, rely on observation and experimentation" (Meyers, 2003, p. 4).

Plagiarism on a homework, class assignment, or exam will be dealt with in a strict fashion, including receiving a **zero for the assignment** and at the instructor's discretion **may result in a grade of zero for the entire course and possibly a hearing before the Dean of Students**; therefore, it could have serious implications for your academic career (e.g., academic probation, suspension, or expulsion). Please refer to the following web site for a complete listing of infringements (including plagiarism) that constitute cheating: <http://documents.weber.edu/ppm/6-22.htm>

ACADEMIC PROBATION

Students who believe that a poor grade in this course may lead to their dismissal from Weber State University should talk to me **BEFORE** the first exam about strategies to improve their class performance. Seeing me after the final exam will not be helpful since extra-credit projects and test retakes are not to be available in this course.

Students who do not perform well on the first exam should come and see me immediately to determine ways in which to help improve your scores for the rest of the course. Coming to see me because you are unhappy with your grade after the third or final exam will be of no avail. At that point in time, it is too late to do anything to improve your grade since no extra-credit or test retakes are available in this class.

This Syllabus:

This syllabus is our contract. It details your obligations to me, and mine to you. If there are any problems, questions, suggestions or concerns about it, please bring them up now! Please bring this syllabus to class with you and record any changes in requirements or deadlines on it. Announcements made in class "count" just as much as policies outlined in the written syllabus.

By continuing in the course after receiving the syllabus, you are consenting to the regulations set forth by the syllabus and to be evaluated accordingly!!!

Aug. 25 (Mon.)	<i>"Introduction" Syllabus</i>	
Aug.27 (Wed.)	<i>Tables & Graphs</i>	Chapter 1
Aug. 29 (Fri.)	<i>Tables & Graphs</i>	Chapter 1
Sep. 1 (Mon.)	LABOR DAY, NO CLASSES	
Sep. 3 (Wed.)	<i>SPSS – meet in computer lab</i>	
Sep. 5 (Fri.)	<i>Central Tendency & Variability</i>	Chapter 2
Sep. 8 (Mon.)	<i>Central Tendency & Variability</i>	Chapter 2
Sep. 10 (Wed.)	<i>Central Tendency & Variability</i>	Chapter 2
Sep. 12 (Fri.)	<i>Review</i>	Chapter 3 SPSS #1 Due
Sep. 15 (Mon.)	EXAM 1- Exam available Sep. 13 – Sep 16 (Sat- Tue)	NO CLASSES
Sep. 17 (Wed)	<i>Z-scores and normal curve</i>	Chapter 3
Sep. 19 (Fri.)	<i>Z-scores and normal curve</i>	Chapter 3
Sep. 22 (Mon.)	<i>Hypothesis Testing</i>	Chapter 5 SPSS #2 Due
Sep. 24 (Wed.)	<i>Hypothesis Testing</i>	Chapter 5
Sep. 26 (Fri.)	<i>Hypothesis Testing</i>	Chapter 5
Sep. 29 (Mon.)	<i>Hypothesis Testing</i>	Chapter 5
Oct. 1 (Wed.)	<i>Review</i>	
Oct. 3 (Fri)	EXAM 2- Exam available Oct. 2 – Oct. 4 (Th-Sat)	NO CLASSES
Oct. 6 (Mon.)	<i>Correlation</i>	Chapter 11
Oct. 8 (Wed.)	<i>Correlation</i>	Chapter 11
Oct. 10 (Fri.)	<i>Correlation</i>	Chapter 11
Oct. 13 (Mon.)	<i>Regression</i>	Chapter 12 SPSS #3 Due
Oct. 15 (Wed..)	<i>Regression</i>	Chapter 12
Oct. 17 (Fri.)	FALL BREAK	NO CLASSES
Oct. 20 (Mon.)	<i>Regression</i>	Chapter 12
Oct. 22 (Wed.)	<i>Review</i>	SPSS #4 & 5 Due
Oct. 24 (Fri.)	EXAM 3 - Exam available Oct. 23 – Oct. 25 (Th-Sat)	NO CLASSES
Oct. 27 (Mon)	<i>Statistical Decisions: Power & Effect Size</i>	Chapter 6
Oct. 29 (Wed)	<i>Statistical Decisions: Power & Effect Size</i>	Chapter 6
Oct. 31 (Fri.)	<i>Single Sample & Dependent T-tests</i>	Chapter 7
Nov. 3 (Mon.)	<i>Single Sample & Dependent T-tests</i>	Chapter 7
Nov. 5 (Wed.)	<i>Single Sample & Dependent T-tests</i>	Chapter 7
Nov. 7 (Fri.)	<i>Review</i>	SPSS # 6 & 7 Due
Nov. 10 (Mon)	EXAM 4 – Exam available Nov. 8 – Nov.11 (Sat – Tu)	NO CLASSES
Nov. 12 (Wed.)	<i>Independent T-tests</i>	Chapter 8
Nov. 14 (Fri.)	<i>Independent T-tests</i>	Chapter 8
Nov. 17 (Mon.)	<i>Independent T-tests</i>	Chapter 8
Nov. 19 (Wed.)	<i>Analysis of Variance</i>	Chapter 9 SPSS # 8 Due
Nov. 21 (Fri.)	<i>Analysis of Variance</i>	Chapter 9
Nov. 24 (Mon.)	<i>Analysis of Variance</i>	Chapter 9
Nov. 26 (Wed)	<i>Review</i>	SPSS #9 Due
	EXAM 5 – Exam available Nov. 25 – Dec. 2 (Tu – Tu)	NO CLASSES
	FINAL EXAM – Available Dec. 1 – Dec. 4 (Mon-Th)	NO CLASSES

NOTE: This schedule is very likely to change as necessary and it is your duty to attend class to learn about the changes. Test dates rarely change; however, material to be covered on test might and often change. If there is time at the end of the semester, we will return to some of the skipped chapters.

Grade Record

Please keep a record of the grades you receive on all of your work. This will help insure that you are always aware of you academic progress in this class.

Please note the dates of any absences you have had:

Home work #1 _____

Home work #2 _____

Home work #3 _____

Home work #4 _____

Home work #5 _____

Home work #6 _____

Home work #7 _____

Home work #8 _____

Home work #9 _____

Home work #10 _____

Review #1 _____

Review #2 _____

Review #3 _____

Review #4 _____

Review #5 _____

SPSS #1 _____

SPSS #2 _____

SPSS #3 _____

SPSS #4 _____

SPSS #5 _____

SPSS #6 _____

SPSS #7 _____

SPSS #8 _____

SPSS #9 _____

*Note remember to drop 1 lowest SPSS homework

Exam #1 _____

Exam #2 _____

Exam #3 _____

Exam #4 _____

Exam #5 _____

Final Exam _____ (Make up Exam if necessary)

Permissions/Notifications:

If at any time you need to notify me of an upcoming absence, tardiness, or any other circumstance that I need to be aware of or if you have a special request due to some special circumstance, you are to submit your request in writing preferably both in hard copy and through electronic copy such as e-mail. This procedure will allow me to remember what agreements or arrangements have been made with you.

Please initial, sign, & turn in to professor in order to receive credit and remain in this class.

_____ I understand that if I miss an exam my Make Up Exam will be the final exam.

_____ I understand that late assignments will be penalized 2 points per day including weekend days.

_____ I understand that there is only 1 choice for extra credit and that extra credit may not be completed after Nov. 24th.

_____ I understand that grade appeals on exams must be done on paper as instructed on the syllabus.

_____ I understand that excessive tardiness, early departures, inappropriate behavior, disruption by electronic gadgetry could result in being asked to leave the classroom on that day or could result in a grade that is one letter grade lower than is indicated by my total point accumulation in the class.

_____ I understand that if I demonstrate any sort of academic dishonesty in any coursework, quiz, assignment, paper or exam in this class, I will receive a 0 on the assignment and could receive a 0 in the entire class if the professor deemed it necessary.

_____ I understand that any request or notification must be done on the form provided with this syllabus.

_____ I understand and agree to behave and treat my fellow classmates and professor with respect.

_____ I understand that announcements made in class "count" just as much as policies outlined in the written syllabus.

_____ I understand that final grades will not be "rounded up" even if I am only one tenth of a decimal away from a higher letter grade.

_____ I understand that if at any time I am in disagreement and unwilling to abide by the policies outlined in the written syllabus, I have the right to drop this class.

My signature indicates that I understand the PSYC 3600 syllabus and have agreed to become a member of this learning community as described in the requirements for Statistics in Psychology.

(NAME)

(DATE)