# PSY281 DATA ANALYSIS IN PSYCHOLOGY

Spring 2015 GMCS-428

# **Teaching Assistants**

TA:	Casey O'Loughlin	Julia Drizin	Kristin Perry
Email:	coloughlin@mail.sdsu.edu	jdrizin@ mail.sdsu.edu	kperry@mail.sdsu.edu
Sections:	1. MW 9-9:50, F 9-9:50 2. MW 4-4:50, F 12-12:50	1. MW 9-9:50, F 9-9:50 3. MW 5-5:50, F 1-1:50	2. MW 4-4:50, F 12-12:50 3. MW 5-5:50, F 1-1:50
Office Hours:	Wed 12:00-2:00	Tue 12:00-2:00	Wed 10:15-12:15

# **Course Learning Objectives**

By the end of this course, you will...:

- 1. ...be able to conduct and interpret basic statistical analyses using SPSS computer software.
- 2. ...be able to enter data, produce graphical displays, obtain descriptive statistics, and conduct hypothesis tests.
- 3. ...be able to make sense of and write about statistical analyses.
- 4. ...have had the opportunity to learn some very marketable skills for a wide range of professional careers, upper-division courses, and graduate school.

## Additional Department Level Learning Objectives

In addition to those outlined above, other learning objectives identified as important across the Psychology Curriculum that overlap with this course are:

- 1. Explain the similarities and differences among the research methods used by psychologists. (SLO 4.2)
- 2. Demonstrate the ability to use visual aids to enhance presentation; the ability to answer difficult questions clearly and succinctly; and the ability to present information in a logical, interesting sequence that audiences can follow (SLO 8.6)

#### Computer Software for this Course

The software package used in this class is SPSS Statistics 19.0 for Macintosh computers running OS X. It is very similar to SPSS Statistics 17.0 for Windows and the skills you learn will translate to a non-Macintosh environment. The computer skills taught in this class will come in very handy in

future classes (e.g., PSY301, PSY370, PSY410), many professional careers (e.g., business, psychology, education, counseling, research, teaching), and your private live (e.g., medical and psychological test, elections, opinion polls, financial planning).

## **Prerequisites**

To earn credit for PSY281 toward your psychology major, you must have already gotten credit in a three-unit statistics course without a computer laboratory component. If this is not the case, let the TA know ASAP, because you cannot receive credit for PSY281.

If you are not a psychology major, you may not need to take PSY281. Check with your academic advisor.

## What to Bring to the Computer Lab

- 1. Yourself! Attendance is mandatory for the first two labs of each week. Attendance is strictly enforced during the first week of classes. Students who do not attend each class meeting in the first week of the semester will be dropped from the course.
- 2. A healthy dose of curiosity, enthusiasm, and interest in learning.
- 3. A USB flash drive (also known as pen or thumb drive).
- 4. Calculator. A basic version with a square and square root function is sufficient. Cost is under \$20.
- 5. Your notes and course handouts from previous weeks.

## <u>Textbook (Optional)</u>

Moore, D.S. (2010) (5th edition). The basic practice of statistics. New York, NY: Freeman.

#### Web Site

Course Website on blackboard.sdsu.edu. Class lectures will be available on the Blackboard site, as will information about TAs, office hours, handouts, assignments, and datasets.

#### Course Format

Weekly Lab Topics: Each week, the TA briefly introduces the topic of the week, reviews basic concepts, illustrates how to use SPSS for investigating a particular problem, and introduces a research project.

Weekly Assignments: During the remaining time, students work on the project assignment and prepare a report to be turned in for feedback and grading. TA's are available to assist students by answering questions and providing advice on how to use SPSS and interpret results.

# Requirements and Grading

*Lab Quizzes*: At the start of each Monday lab there will be a short 5 minute quiz (with books and notes closed). These will be geared towards testing your ability to apply what you have learned in the previous lab to a given research scenario. The Monday quizzes will count towards your grade (see below).

Weekly Assignments: All assignments are due at the end of your lab meeting on the Friday of the week that you received the assignment. You may drop **ONE** assignment at the end of the term, either because you weren't able to complete it or because it earned the lowest score among the assignments that you completed.

Comprehensive Final Exam: There will be a comprehensive exam administered on the date noted in the SDSU Final Exam Schedule. The exam will follow both a multiple choice and short question and answer type format. Your TA will provide additional information to help you study for the exam.

Comprehensive Final Project: There will be a comprehensive final project, due on 5/4 at the <u>beginning</u> of your regular class meeting time. A detailed description of the project will be distributed later in the term.

#### COURSE GRADE BREAK-DOWN:

Weekly assignments: 10	50%
Final Project: 1	23%
Comprehensive Exam: 1	21%
Lab Quizzes: 10	6%

Your weighted average percentage across all the course assignments will be used to determine your letter grade in the course. One assignment with the lowest points will be dropped.

Note that the following letter grade ranges are provided as guidelines only.

$$A = 90\%$$
 or above;  $B = 80 - 89.9\%$ ;  $C = 70 - 79.9\%$ ;  $D = 60 - 69.9\%$ 

Disclaimer: Grading guidelines are tentative and preliminary. Grading guidelines may be changed ( $\pm$  2%) at any time to reflect changes in assignments, materials covered in class, and grading standards.

A grade of "U" indicates that you enrolled in a course, did not withdraw from the course, but failed to complete course requirements. For purposes of GPA computation, this grade is equivalent to an "F". If you attend a portion of a course and then, after receiving a failing grade, stop attending without officially withdrawing, you will receive a final grade of "F" rather than "U".

A grade of "I" for "incomplete authorized" is only given when a minor portion of required coursework has not been completed and evaluated in the prescribed time period due to

unforeseen, but fully justified, reasons. It is your responsibility to bring pertinent information to the instructor and to reach an agreement on the means by which the remaining course requirements will be satisfied. An incomplete shall not be assigned when the only way you could make up the work would be to attend a major portion of the class when it is offered next.

### Late Assignments

No late assignments will be accepted unless...

- (a) ...you talked to your TA prior to the deadline and received permission to hand in your assignment late, or
- (b) ...there was an unpredictable and serious emergency. Provide your TA with a copy of your doctor's note or a police report.

#### Students with Disabilities

If you are a student with a disability and believe you will need accommodations for this class, it is your responsibility to contact Student Disability Services at (619) 594-6473. To avoid any delay in the receipt of your accommodations, you should contact Student Disability Services as soon as possible. Please note that accommodations are not retroactive, and that accommodations based upon disability cannot be provided until you have presented your instructor with an accommodation letter from Student Disability Services. Your cooperation is appreciated.

# Missing Class

Missing class does not excuse a student from handing in an assignment on time. Students must contact their TA prior to a deadline and have a valid excuse and documentation to receive an extension of an assignment deadline. Papers handed in after the deadline without the TA's permission will receive 0 points.

## <u>Policy Regarding Academic Dishonesty</u>

Academic dishonesty is a serious form of unethical behavior and will not be tolerated.

All prelabs, project reports, and exams must reflect a student's own and independent thinking and writing. That is, you may not copy descriptions, explanations, printouts, or graphs from other students or tutors.

As soon as a TA observes or suspects an instance of academic dishonesty, s/he will inform the Department office, which will immediately initiate a preliminary investigation. If the preliminary investigation indicates academic dishonesty, SDSU's Center for Student Rights and Responsibilities (http://www.sa.sdsu.edu/srr/index.html) will be informed and an Academic Dishonesty Incidence Report will be filed.

Depending on the outcome of the investigation, the student may be expelled, suspended, or placed on probation. In addition, the student will receive an F (0 points) for the assignment. Two instances will lead to an immediate course grade of F.

You can view a flowchart of the judicial process here: http://www.sa.sdsu.edu/srr/discipline2.html If you have any questions about academic dishonesty or this policy, please ask your TA.

# Tentative Schedule

Dates	Topics
1/19 – 2/13	Research Methods (Ch. 4)  Descriptive Statistics and Graphing (Ch. 1 and 2)
2/16-3/13	Inferential Statistics (Ch. 3, 11, & 14) One-Sample t-tests (Ch. 17) Two-Sample t-tests (Ch. 18)
3/16 -4/10	Analysis of Variance (Ch. 24)
Note: No class 3/30 – 4/3 (Spring Break)	
4/13 – 5/4	Final Project (Due 5/4 at the <u>beginning</u> of your class)
5/4	Final Exam Review
5/8 – 5/14	Final Exam
* Note: We will follow the final exam schedule established by the University:	
Section 1: 5/11, 8:00-10:00 AM Section 2: 5/11, 3:30-5:30 PM Section 3: 5/8, 3:30-5:30 PM	