

PSYCHOLOGY 10

Analysis of Psychological Data

Fall 2014

INSTRUCTOR:

Dr. Depaoli (sdepaoli@ucmerced.edu)

Office Location: SSM 312A

Office Phone: (209) 228-4549 (although email will result in a faster response)

Office Hours: Thursdays 12:30-2:30pm

Course Website: www.sarahdepaoli.com

— Modified lecture notes will be regularly posted here, as well as HW and quiz answers

TEACHING ASSISTANTS:

- James Clifton (*graduate student-quantitative psychology*): jclifton@ucmerced.edu, SSM 320, Office hours = Tuesdays 10:00-12:00pm
- Steven Ramondt (*graduate student-health psychology*): sramondt@ucmerced.edu, SSM 346, Office hours = Wednesdays 10:00-12:00pm

– A note about office hours: In an attempt to create a convenient schedule for students, we have created office hours that span across different times and days during the week. You are encouraged to attend office hours that are most convenient for you. Note that due to potential scheduling conflicts it will NOT be possible to accommodate special appointments outside of office hours that are requested less than 48 hours in advance. You are encouraged to either set up appointments well in advance or to attend the regularly scheduled office hours; last-minute appointments with TAs cannot be accommodated.

COURSE TIME/LOCATION:

TR 7:30-9:20am, SSB 160

COURSE DESCRIPTION:

Psychology 10 is designed to provide you with a general introduction to statistical methods in psychology and the cognitive sciences. Psychology may be defined as a science of behavior and mind, but all the data in the world is useless if you do not know what to do with it. This course is meant to be a general but comprehensive survey of basic statistical methods.

PREREQUISITES:

Successful completion of Psychology 001 *or* Cognitive Sciences 001 (with a grade C- or higher)

REQUIRED TEXT:

Privitera, G. J. (2012). *Statistics for the Behavioral Sciences*. Los Angeles, CA: Sage.

- Note that the study guide is recommended for an additional \$5 in the bundle package offered in the bookstore

ADDITIONAL MATERIALS:

- A standard calculator—it should be able to perform basic calculations as well as square roots and exponents. Graphing calculators will NOT be allowed during quizzes or exams. *Note: any devices with wireless capabilities will be prohibited during quizzes and exams!!*
 - **If you do not bring your calculator to class every day, you may not be able to take quizzes (i.e., you may earn a grade of zero)**
- One BIG RED scantron for the first quiz on 9/2/2014
- SKINNY RED scantrons for all other in-class quizzes, exams, and final (each student will need 14 SKINNY RED scantrons for the course so just buy them all at once)
- Blank scratch paper can be brought to each quiz and exam. However, students will have to show TAs the paper to ensure it is blank before use.

COURSE GOALS:

- Become well acquainted with various statistical tests and measures.
- Understand and be able to communicate basic ideas in the discipline in a meaningful way by utilizing basic terms of the discipline.
- Become familiar with basic areas of application of psychological knowledge.
- Develop a rudimentary understanding of the way statistics are used (and misused) in popular culture.
- Understand the underlying concepts behind various statistical tests.
- Understand the reasoning processes used by the psychologist to arrive at particular conclusions regarding human behavior.

COURSE OUTCOMES:

- Understanding of various statistical tests and measures.
- Understand and be able to communicate basic ideas in the discipline in a meaningful way by utilizing basic terms of the discipline.
- Become familiar with basic areas of application of statistics.
- Understanding of the way statistics are used (and misused) in popular culture.
- Understanding of the underlying concepts behind various statistical tests.
- Understanding of the reasoning processes used by the psychologist to arrive at particular conclusions regarding human behavior.

COURSE ASSIGNMENTS:

Grading is based on: 12 homework assignments, 10 in-class quizzes, 3 in-class exams.

- Homework assignments (20% of final grade):
 - Every Wednesday a homework assignment will be posted on CROPS. The assignments are due at the beginning of class (i.e., at 7:30am) the following Tuesday via CROPS. You may work in groups on the homework assignments if you like. However, you should be aware that the in-class quizzes will often be assessing the same material as the homework assignment. As a result, you should be sure that you are able to complete the assignment problems on your own. There will be a total of 12 homework assignments given throughout the semester. Each homework assignment is worth 1.67% of your final grade.
 - * There is a strict policy of **NO makeup homework assignments** throughout the semester also **NO late work will be accepted**.
- Tuesday quizzes (20% of final grade):
 - The lectures held on Tuesdays will start with an in-class quiz. The professor will present problems on the board that are similar to your homework assignment. You will be given 10-20 minutes (depending on the problem set) to complete the quiz. You will submit your answers on a RED scantron that is handed in. Your two (2) lowest quiz scores will be dropped from your final grade. There will be a total of 12 quizzes given throughout the semester and only the top 10 quizzes you performed the best on will count towards your final grade (i.e., there are two (2) “freebies” built into the semester). Each quiz counting toward your final grade is worth 2% of your final grade.
 - Note that there is no quiz during exam week. However, there IS a quiz the Tuesday after the exam which will cover the last material covered right before the exam.
 - Students who do not have the proper scantron on the day of the quiz will have **1 point deducted** from their final grade on the quiz.
 - * There is a strict policy of **NO makeup quizzes** throughout the semester. Note that make-up quizzes are only considered if there are more than 2 (i.e., at least 3) excused absences approved by the professor. The purpose of giving you two “freebies” is to allow for missing up to two quizzes. Therefore, illness (etc) will not be an excuse to make up a quiz unless you have missed more than two (with all absences excused).
 - * **Students must work ALONE on quizzes**—see section on Academic Integrity for consequences of violations.
- In-class exams (60% of final grade):
 - There will be 2 in-class exams during the regular semester and one cumulative final (i.e., covering the entire semester worth of material) during finals week. Exam material will come from the textbook and from lecture material. Each exam is worth 20% of your final grade.
 - Students who do not have the proper scantron on the day of the exam will have **2 points deducted** from their final grade on the exam.

- * **Students must work ALONE on exams**—see section on Academic Integrity for consequences of violations.
- * Make-up exams will be given to students who can demonstrate that they missed the exam due to the most extreme of circumstances.
- * If you miss an exam, you must notify Professor Depaoli at least 2 days in advance and schedule a make-up exam.
- * If you are sick or have another emergency on the day of the exam, you must notify Professor Depaoli as soon as possible.
- * Appropriate documentation **MUST** be provided before you can make up the exam and the ability to make up an exam is determined solely by Professor Depaoli on a case-by-case basis: I reserved the right to refuse make-up exams.
- * Note that depending on the circumstances of the make-up exam, I reserve the right to give a make-up that consists entirely of written problems in the place of multiple choice items.

BASIC STRUCTURE OF LECTURES:

- Tuesday: HW due at beginning of class via CROPS; quiz; professor lectures remaining class period
- Thursday: Professor will lecture a little more than half of the class period; the rest of the class period will be an optional “discussion” session, where students can ask questions or additional examples are covered upon request

GRADES:

	Total Points	Letter Grade	Total Percentage
Exams (100 pts each)	300 pts	A	100-93%
Homework (10 pts each)	120 pts	A-	92.99-90%
In-class quizzes (10 pts each)	100 pts	B+	89.99-87%
Total	520	B	86.99-83%
		B-	82.99-80%
		C+	79.99-77%
		C	76.99-73%
		C-	72.99-70%
		D+	69.99-67%
		D	66.99-63%
		D-	62.99-60%
		F	<60%

- Course Grades:
 - Grades are never rounded up in this course. For example, if a student receives an 89.99% in the course, it will be recorded as a grade of B+. A grade situation similar to this will not be “rounded” because the minimum percentage to earn an A-, for example, is a 90.00%. All students will receive letter grades exactly according to the grading scale presented above.
 - On a similar note, each semester we receive requests for a final grade to be “bumped up” at the end of the semester. Grades will not be “bumped up” at the end of the semester under any circumstances. Each student will receive the grade that they have earned based on the grading scale provided. For example, if a student has a 59.99% as a final grade, they will not be “bumped up” to a D- range under any circumstances.
- Incomplete Grade in Course:
 - A grade of “I” (Incomplete) will be assigned only at the discretion of the instructor and only in the event of extraordinary circumstances. A written request must be filed and a written approval granted before the Incomplete may be taken

USE OF CROPS:

Although course material will be presented on the course website (see first page of syllabus for web address), there will also be a substantial amount of work posted on CROPS. Most notably, all of the weekly homework assignments will be posted on CROPS each Wednesday (unless otherwise noted). Note that you can only submit an assignment ONCE, but you have an unlimited amount of time to work on it up until the due date. If you have any difficulties with CROPS (e.g., submitting homework assignments), please contact one of us immediately.

EXTRA CREDIT AND ATTENDANCE:

Attendance is not mandatory in the sense that I will not be taking role. However, you should be aware that there is a DIRECT relationship between doing poorly in class and not attending lectures. Also, if you miss class, you will not earn the random extra credit that I will offer throughout the semester. It may not seem like a big deal right now, but YOU WILL REGRET IT later in the semester if you do not attend class regularly. You are all adults, and I expect that you can make the best decision for yourselves.

TUTORING OPPORTUNITIES:

If attending class, studying, and use of TAs is still not enough for you, there are some tutoring opportunities available on campus. The Bright Success Center Tutoring Program can be found at: learning.ucmerced.edu/ in the Kolligian Library Room 222 with Hours of Operation: Monday - Friday 8:30am - 5:00pm

ACADEMIC INTEGRITY:

Students should be familiar with University policies on academic honesty. A general code of conduct for the University of California can be found at:

<http://www.ucop.edu/ucophome/coordrev/ucpolicies/aos/uc100.html>.

- Basically, do not cheat or plagiarize. This will earn you a very uncomfortable meeting with the professor of the course and a **ZERO** on the exam/assignment.
- **There is NO exception to this rule!!**
- Students who are caught cheating on an in-class quiz and/or an exam will be **immediately** asked to leave the class. The cheating incident will be reported to the Undergraduate Dean of Students, and a zero will be given for the score of the quiz/exam.
- Note that this policy will be upheld equally for people trying to copy work and also for people trying to help others.
- If you have questions about this policy and/or the consequences listed above, please see the professor as soon as possible.

USE OF ELECTRONIC DEVICES IN CLASS:

The use of wireless electronic devices (e.g., laptops, smart phones, ipods, etc.) is a privilege and not a right. If even a single student is being disruptive while texting, emailing, playing games, reading, on Facebook, etc. during class, then the entire class must put away all electronic devices for the remaining class session (including laptops). These devices can be used as learning tools (e.g., to take notes with or follow along on the slides), but any personal use of these devices is **strictly prohibited** during class time.

STUDENTS WITH SPECIAL NEEDS:

UCM provides individuals with disabilities reasonable accommodations to participate in educational programs, activities, and services. Students with disabilities requiring accommodations to participate in class activities or meet course requirements should contact the professor as early as possible, and also contact the UCM Disability Services Center located in Room 107 of the Kolligian Library (209-381-7862) to obtain their assistance and coordination in working with this course.

CLASSROOM CIVILITY:

Each UCM student is encouraged to help create an environment during class that promotes learning, dignity, and mutual respect for everyone. Students who speak at inappropriate times, sleep in class, display inattention, take frequent breaks, interrupt the class by coming to class late, engage in loud or distracting behaviors, use cell phones or other electronic devices in class, use inappropriate language, are verbally abusive, display defiance or disrespect to others, or behave aggressively toward others could be asked to leave the class and be subjected to disciplinary action.

COURSE OUTLINE AT A GLANCE:

Week	Chapter	Quiz# (Tues)	HW# (Due Tues- or other day as stated in class)	HW# (Assigned Wed)	Exam#
1	1	N/A	N/A	1(Thurs)	
2	2,3	1	1(Wed)	2	
3	3,4	2	2(Wed)	3	
4	5	3	3	4	
5	N/A	N/A	4	N/A	1
6	6,7	4	N/A	5	
7	8	5	5	6	
8	9,11	6	6	7	
9	9,11	7	7	8	
10	N/A	N/A	8	N/A	2
11	10,11	8	N/A	9	
12	12	9	9	10	
13	15	10	10	11	
14	N/A	N/A	N/A	N/A	
15	16	11	11	12	
16	N/A	12	12	N/A	
FINALS					3

DETAILED COURSE OUTLINE:

**Note that the following schedule is subject to change without notice.

****Note that it is the responsibility of the student to bring a SKINNY RED scantron, pencil, blank scratch paper, and class-approved calculator to class every Tuesday for quizzes and every exam day. Failure to do so may prevent the student from being able to complete the assessment (i.e., the student may receive a grade of zero for that assessment).**

Week 1 (8/28): *Introduction, Syllabus, Statistics in Research*

- Reading for the week: Privitera–Chapter 1
- Assignments, etc: None

Week 2 (9/2 & 9/4): *Statistics in Research cont., Frequencies and Graphs, Central Tendency*

- Reading for the week: Privitera–Chapter 2-3
- Assignments, etc: In-class quiz #1 Tuesday; Homework 1 due **Wednesday**

Week 3 (9/9 & 9/11): *Central Tendency cont. and Variability*

- Reading for the week: Privitera–Chapter 3-4
- Assignments, etc: In-class quiz #2 Tuesday; Homework 2 due **Wednesday**

Week 4 (9/16 & 9/18): *Probability*

- Reading for the week: Privitera–Chapter 5
- Assignments, etc: In-class quiz #3 Tuesday; Homework 3 due Tuesday

Week 5 (9/23 & 9/25): *Review (T) and Exam (R)*

- Reading for the week: Review!
- Assignments, etc: Homework 4 due Tuesday; Exam I on Thursday

Week 6 (9/30 & 10/2): *Review of Exam (T), Normal Distribution and Sampling Distributions*

- Reading for the week: Privitera–Chapter 6-7
- Assignments, etc: In-class quiz #4 Tuesday

Week 7 (10/7 & 10/9): *Hypothesis Testing*

- Reading for the week: Privitera–Chapter 8
- Assignments, etc: In-class quiz #5 Tuesday; Homework 5 due Tuesday

Week 8 (10/14 & 10/16): *One-sample t-test (CH9) and related Confidence Intervals (parts of CH11)*

- Reading for the week: Privitera–Chapter 9,11
- Assignments, etc: In-class quiz #6 Tuesday; Homework 6 due Tuesday

Week 9 (10/21 & 10/23): *Two-sample t-test (CH9) and related Confidence Intervals (CH11)*

- Reading for the week: Privitera–Chapter 9,11
- Assignments, etc: In-class quiz #7 Tuesday; Homework 7 due Tuesday

Week 10 (10/28 & 10/30): *Review (T) and Exam (R)*

- Reading for the week: Review!
- Assignments, etc: Homework 8 due Tuesday; Exam II Thursday

Week 11 (11/4 & 11/6): *Review of Exam (T), Paired t-test and related Confidence Interval*

- Reading for the week: Privitera–Chapter 10,11
- Assignments, etc: In-class quiz #8 Tuesday

Week 12 (11/11 & 11/13): **VETERANS DAY–No Class Tuesday**; *Analysis of Variance*

- Reading for the week: Privitera–Chapter 12
- Assignments, etc: In-class quiz #9 **Thursday**; Homework 9 due Tuesday

Week 13 (11/18 & 11/20): *finish Analysis of Variance; Correlation*

- Reading for the week: Privitera–Chapter 15
- Assignments, etc: In-class quiz #10 Tuesday; Homework 10 due Tuesday

Week 14 (11/25 & 11/27): *finish Correlation*; **THANKSGIVING–No Class Thursday**

- Reading for the week: None
- Assignments, etc: None

Week 15 (12/2 & 12/4): *Regression*

- Reading for the week: Privitera–Chapter 16
- Assignments, etc: In-class quiz #11 Tuesday; Homework 11 due Tuesday

Week 16 (12/9 & 12/11): *Review and Overview*

- Reading for the week: Review all material in preparation for the final exam!!
- Assignments, etc: In-class quiz #12 Tuesday; Homework 12 due Tuesday

FINAL EXAM WEEK:

12/15: Scheduled Final Exam Day 11:30-2:30pm, SSB 160

- Bring SKINNY RED scantron, pencils, blank scratch paper, and class-approved calculator
- *Note that you will have 3 hours to complete the cumulative final exam (meaning it covers the entire semester worth of material).* Given that there will be another final scheduled right after ours, I cannot allow you extra time on the exam...so practice good time-management!!

