Psychology 300-01 and 300-01L
Psychological Research and Statistical Methods and Lab I
Fall Semester 2011

Lecture (SMI, Rm 1908): Monday 9:00am – 11:50am
Computer Lab (Bell Tower, Rm 1716): Wednesday 10:00am – 11:50am
California State University Channel Islands

Instructor: Dr. Kimmy S. Kee

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Office Hours:

Monday	12:00 – 2:00pm
Tuesday	7:00 – 8:00pm
Wednesday	9:15 – 9:45am
Wednesday	2:00 – 2:30pm
Friday	12:00 – 1:00pm

Additional hours may be available by appointment. Please call or EMAIL!

Teaching Assistants: Ms. Maria Rose Downey
Ms. Trisha Taylor

Office Hours:

Tuesday	10:00am – 12:00pm
Thursday	10:00am – 12:00pm

Course Objectives:

PSY 300 and 300L is a required course for Psychology majors. The goal of this course is to provide you with a basic understanding of research methodology and a framework to evaluate social and behavioral science research. An additional goal is to expand and apply your understanding of basic biostatistical methods. Topics include: i) how to apply the scientific method within the field of psychology and social sciences, ethical guidelines and issues related to the research in, and practice of, psychology; ii) how to evaluate research and popular claims in psychology with a critical eye; and iii) how statistical tools work, when they should be applied, and what types of information can be gained from their use in research. Applications will be stressed throughout the course. Lab assignments will provide you opportunities for practice of statistical techniques and experience with statistical software. **Emphasis is on the**

fundamentals and assumptions, <u>not</u> on calculations and mathematical theories.

Prerequisite: PSY 100; PSY 202 or PSY 303; and Upper division standing or Consent of the instructor.

Student Learning Outcomes:

1. Students who complete this course can articulate the basic tenets of the empirical method in psychology.
2. Students can verbalize basic statistical concepts and techniques, including when to use and when not to use different types of statistical procedures. Also, students can describe the assumptions and explain the limitations underlying the different methods.
3. Students can read, understand, and critically review and evaluate research reports published in psychological journals on the basis of their validity (e.g., construct, internal, external, statistical) and conformity to the ethical principles for psychologists as defined by the American Psychological Association (APA).
4. Students can apply the experimental method to answer questions about behavior through participation in laboratory exercises and experiments.
5. Students can develop necessary skills for an efficient review of the psychological literature using a computerized index (e.g., PsychLIT; PsychINFO).
6. Students can design and conduct well-controlled experiments.
7. Students can apply their knowledge to determine the appropriate statistical technique for use with specific research questions (i.e., match design and analysis to study aims).
8. Students can utilize basic statistical software, such as SPSS, for data analysis.
9. Students can interpret information from computer printouts.
10. Students can present findings and write up research reports according to the stylistic conventions of the American Psychological Association (APA).

Course Requirements:

During the semester, you will be given the following assignments:

Weekly Reading Assignments. Read the textbooks and other assigned readings before attending class. As you read the materials, jot down issues that arise or questions that come up. In class, be an active learner. Try to connect the information in the lecture with your readings. Lecture presentations may emphasize some points from the text and may also include additional information from other sources. ***Therefore, just reading from your textbooks or just attending class is not sufficient to meet the course objectives.***

Lab Assignments. For the lab, you will be required to attend weekly lab sessions. In these sessions, you will conduct literature reviews, design and conduct empirical studies, analyze data using the SPSS program, discuss the mechanics of research, and write results according to APA specifications. ***Your grade will be based upon your attendance, participation, and ability to utilize the SPSS program. If you consistently fail to attend the lab, your grade will be adjusted accordingly.***

Homework Assignments. You will be given 5 homework assignments related to the lecture, textbooks, and lab materials. These assignments will be due **without exception** at the beginning of the class one or two weeks following their distribution, as specified. They will count toward your 25% homework grade. Assignments may include either:

a. research or statistical problems,
b. article critiques (maximum 3 typed pages), or
c. computer printout write-ups according to APA specifications

Research Project. Over the course of the semester, you will be asked to:

a. design and conduct a study
b. analyze data
c. present findings in class
d. write a research report (aim for about 12 typed pages)

This project is designed to permit "hands-on" experience of data collection, management, and analysis. You are strongly encouraged to work in groups of three or four students on this project. However, each student must participate equally in the production of the project. There will be periodic "deadlines" for each project component throughout the semester to help you stay "on-track" in completing the project on time.

10% grade: Project will be presented in class at the end of the semester (20 minutes per group).
10% grade: Research report (maximum 12 pages).

Exams. The two examinations (midterm and final) are scheduled for the following dates: **Monday, October 24th (Midterm – Part I) and Wednesday, October 26th (Midterm – Part II); Monday, December 12th (Final – Part I) and Wednesday, December 14th (Final – Part II)**. Each examination (25%) will be given during regular class time and will consist of multiple choice, short answer, and essay questions. Content for each examination will be drawn from both the assigned readings and class as well as lab lecture material. The examinations will be non-cumulative. **Please remember to bring a Scantron form and #2 pencil to class on these days!**

Make-up Exams. If any of these dates presents a particular problem for you, please see me as soon as possible. Due to the rapid pace of the

course, make-up exams are extremely difficult to arrange. Hence, there are no make-up exams. If you miss an exam without prior notice, please ensure that you have appropriate documentation to support your absence. I will deal with these situations on a case-by-case basis.

Extra Credit Paper. For this assignment, discuss an example of good, questionable, or poor use of research or statistical concepts related to topics covered in class. You may use materials drawn from advertisements, newspaper articles, or published papers (aim for about 2-3 typed pages).

Grades:

For the class, your final grade will be based upon your class attendance and participation, performance on homework assignments, a research project (class presentation and paper), two examinations, and an extra credit assignment (optional). The weighting of these is as follows:

Class Attendance and Participation:	5%
Homework Assignments:	25%
Research Report:	10%
Research Presentation:	10%
Midterm Exam:	25%
Final Exam:	25%
Extra Credit:	TBA

The goal of this course is to provide you with opportunities to gain new knowledge in research methodology in psychology and social sciences as well as to study statistical concepts and their applications in research. To this end, I make every effort to teach each student in a manner in which they can best grasp the material. As such, I ***do not*** grade students based upon the performance of ***other*** students in the class. I do not "curve" tests or final grades. I do not ***give*** grades. Students ***earn*** them. Grades are assigned as follows:

A	94 to 100%	C	73 to 76%
A-	90 to 93%	C-	70 to 72%
B+	87 to 89%	D+	67 to 69%
B	83 to 86%	D	61 to 66%
B-	80 to 82%	D-	55 to 60%
C+	77 to 79%	F	below 55%

These grades are general guidelines and can be used to chart your progress throughout the semester. I reserve the right to change grades at the end of the term. Be advised that I will ***not*** lower a grade that you have rightfully earned. Rather, I will consider your class participation and performance over the course of the term in adjusting grades upward.

Course Policy:

Absences. The pace at which we will be covering the different research methods as well as statistical concepts and applications over the course of the semester will appear both rapid and comprehensive. As such, missing even one class or lab will put you at a disadvantage in mastering the material. I plan on making each lecture as interesting and as interactive as possible. Your absence impedes my ability to meet these goals. If you miss a class, it is your responsibility to obtain missing notes from one of your classmates. You should also arrange to have someone turn in your homework assignment and collect the next one. ***Late assignments lose 5% per day.***

Academic Honesty. All work you submit as your own work must, in fact, be your own work. Any information acquired, learned, or copied from other source must be cited. For example, if a paper presents ideas of others, it must clearly indicate the source. Word-for-word language taken from other sources – books, papers, web sites, people, etc. – must be placed in quotation marks and the source identified. Likewise, work on examinations must be your own work, not copied or taken from other students' work. You must also comply with instructions regarding use of books, notes, and other materials.

In accordance with the CSU Channel Islands policy on academic dishonesty, students in this course who submit the work of others as their own (plagiarize), cheat on tests and examinations, help other students cheat or plagiarize, or commit other acts of academic dishonesty will receive appropriate academic penalties, *up to and including failing the course.*

A homework assignment and/or class paper with plagiarized ideas or language will be graded "F" and must be rewritten with proper use of quotations and referencing. The grade of "F" will remain the recorded grade on that assignment.

In cases where the cheating or plagiarism was premeditated or planned, students will receive an "F" for the course.

You are encouraged to consult with me on when and how to document sources if you have questions about what might constitute an act of plagiarism or cheating.

Classroom Behavior. The classroom is a special environment in which students and faculty come together to promote learning and growth. It is essential to this learning environment that respect for the rights of others seeking to learn, respect for the professionalism of the instructor, and the general goals of academic freedom are maintained. Differences of viewpoint or concerns should be expressed in terms that support the

learning process, create an environment in which students and faculty may learn to reason with clarity and compassion, to share of themselves without losing their identities, and to develop an understanding of the community in which they live. Student conduct that disrupts the learning process will not be tolerated and may lead to disciplinary action and/or removal from class.

Student with Disabilities. Cal State Channel Islands is committed to equal educational opportunities for qualified students with disabilities in compliance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. The mission of Disability Accommodation Services is to assist students with disabilities to realize their academic and personal potential. Students with disabilities needing accommodation should contact the Disability Accommodation Services, Bell Tower, East Wing, Room 1769 (805-437-8510). All requests for accommodations require appropriate advance notice to avoid a delay in services. Please discuss approved accommodations with me.

Miscellaneous. Information contained in this syllabus, other than that mandated by the University, may be subject to change with advance notice, as deemed appropriate by the instructor.

Class Texts: Jackson, S. L. (2012). Research Methods and Statistics: A Critical Thinking Approach, 4th Edition. Belmont, CA: Thompson/Wadsworth. *** REQUIRED ***

Stanovich, K. E. (2010). How to Think Straight about Psychology, 9th Edition. Boston, MA: Allyn & Bacon. *** REQUIRED ***

American Psychological Association (2009). Publication Manual of the American Psychological Association, 6th Edition. Washington, DC: Author. *** OPTIONAL ***

Howell, D. C. (2004). Fundamental Statistics for the Behavioral Sciences, 5th Edition. Belmont, CA: Brooks/Cole-Thomson Learning. *** OPTIONAL ***

Lab Text: Stern, L. (2010). A Visual Approach to SPSS for Windows: A Guide to SPSS 17.0, 2nd Edition. Boston, MA: Allyn & Bacon. *** REQUIRED ***

Additional readings may be handed out in class and/or posted on the course Blackboard. BRING A USB FLASH DRIVE AND A CALCULATOR TO EACH CLASS!

SCHEDULE FALL SEMESTER 2011

Date		Lecture Topic	Reading Assignment	Homework Assignment, etc.
Mon Wed	8/29 8/31	What is Science?	Jackson: Chapter 1 Stan: Chapter 1 Reading: Kerling	
Mon	**9/5**	**LABOR DAY HOLIDAY**		
Wed	9/7	What is Science?	Jackson: Chapter 1 Stan: Chapter 2 Reading: Kerling	HW #1 Distributed
Mon Wed	9/12 9/14	Getting Started: Library Research	Jackson: Chapters 2, 3, 14	HW #1 Due
		Measurement Basics		HW #2 Distributed
Mon Wed	9/19 9/21	Reliability	Jackson: Chapter 3 Stan: Chapter 3 Reading: Popham SPSS: Chapters 1, 2, 3	Think of Research Ideas; Form Research Group
Mon Wed	9/26 9/28	Validity	Jackson: Chapter 3 Reading: Messick SPSS: Chapters 4, 6, 7	HW #2 Due
				Work on Research Proposal (aims, hypotheses, etc.)
Mon Wed	10/3 10/5	Descriptive Methods	Jackson: Chapter 4 Stan: Chapter 4	HW #3 Distributed
				Submit Research Proposal
Mon Wed	10/10 10/12	Basic Statistics: Data Organization and Descriptive Statistics	Jackson: Chapter 5 SPSS: Chapters 8, 9	Research Proposal Returns
Mon Wed	10/17 10/19	Basic Statistics: Descriptive Statistics	Jackson: Chapters 5, 14, 15 Reading: APA Publication Manual	HW #3 Due
		APA Guidelines		
		Review for Midterm Exam		
Mon	10/24	*****MIDTERM EXAM – PART I*****		
		Work on Research Project		
Wed	10/26	*****MIDTERM EXAM – PART II*****		
		Work on Research Project		

SCHEDULE FALL SEMESTER 2011

Date		Lecture Topic	Reading Assignment	Homework Assignment, etc.
Mon Wed	10/31 11/2	Correlational Research and Statistics	Jackson: Chapter 6 Howell: Chapter 9 Stan: Chapter 5 SPSS: Chapter 10	HW #4 Distributed Work on Research Project
Mon Wed	11/7 11/9	Correlational Research and Statistics Hypothesis Testing	Jackson: Chapters 6, 7 Howell: Chapters 8, 9 SPSS: Chapter 10	Work on Research Project; Prepare Presentation
Mon Wed	11/14 11/16	Inferential Statistics: One Sample	Jackson: Chapter 8 Howell: Chapter 12 SPSS: Chapter 13	HW #4 Due HW #5 Distributed Prepare Presentation
Mon Wed	11/21 11/23	Inferential Statistics: Two-Groups Designs	Jackson: Chapter 10 Howell: Chapter 14 SPSS: Chapter 13	Prepare Presentation; Work on Research Report
		Schedule Presentations		
Mon Wed	11/28 11/30	Inferential Statistics: Two-Groups Designs	Jackson: Chapter 10 Howell: Chapter 13 SPSS: Chapter 13	Prepare Presentation; Work on Research Report
Mon Wed	12/5 12/7	Student Presentations		
		Review for Final Exam		HW #5 Due
Mon	12/12	*****FINAL EXAM– PART I *****		
Wed	12/14	*****FINAL EXAM– PART II *****		
		Research Report Due at 12:00pm		

NOTE: Schedule subject to change as necessary. If you are absent from class, it is your responsibility to check on announcements made while you were away.