

PSYC 105 – Experimental Psychology
Spring 2013
Wed. 6:30pm-9:35pm – W213B
Wed. 6:30pm-8:35pm – W211
E-mail: rsoicher@sierracollege.edu

Phone: 916-800-4394 (*call or text between* 9:00am – 8:00pm)

Textbook (required):

Bonds-Raacke, J. & Raacke, J. (2012). *Research methods: Are you equipped?*. Upper Saddle River, NJ: Pearson Education, Inc. (ISBN: 978-0-13-502268-9)

PREREQUISITE CLASSES: Completion of PSYC 100; completion of or concurrent enrollment in PSYC 142 OR completion of MATH 13; grades of "C" or better required. *It is recommended that students complete or concurrently enroll in PSYC 142*

Introduction to research methodology, experimental design and hypothesis testing in the behavioral sciences. Includes the execution, evaluation and reporting of individual research projects. (CSU, UC).

Student Learning Objectives:

Upon completion of this course, you will be able to:

- Identify and describe the major goals of psychological research.
- Identify the characteristics of scientific psychology.
- Define and differentiate between the scales of measurement.
- Compare and contrast reliability and validity as it relates to psychological experiments.
- Differentiate between the major measurement strategies and their purposes (e.g., observational, survey, self-report).
- Describe and explain the strengths and weaknesses of correlational research.
- Evaluate ethical considerations related to conducting psychological research.

Laboratory Objectives:

- Design and carry out a valid psychology experiment including a written report of the experiment.
- Identify and defend valid methodology and design for research projects in psychology.
- Critique and evaluate peer projects. Provide constructive feedback regarding proper experimental procedures.

| Grading: Grades will be based on the following point distribution: | | A = 1102 - 1225 pts. B = 980 - 1101 points | |
|---|------------|---|--|
| Online Orientation | 10 points | C = 857 - 979 points | |
| Research Paper | 100 points | D = 735 - 856 points | |
| Oral Research Presentation | 100 points | F < 735 points | |
| 3 Rough Drafts (50 points each) | 150 points | | |
| 3 Peer Reviews (25 points each) | 75 points | | |
| 4 2-Phase Quizzes (100 points each) | 400 points | | |
| 13 Lab Assignments (30 points each) | 390 points | | |

Total: 1225 points



Additional Policies:

- Contacting the Instructor I am available during office hours, via e-mail, via phone/text, and by appointment. I encourage you to contact me at any time to clarify concepts taught in class or ask any questions you may have. I look forward to helping you!
- Cheating and Academic Dishonesty Cheating will not be tolerated under any circumstance. This includes any situation in which you claim someone else's work as your own, including plagiarism of scholarly work, copying answers from fellow students, or any other such case. If cheating is suspected on any assignment, you will receive a zero for that assignment. Academic dishonesty may lead to an "F" in the course or further disciplinary action from the college discipline officer.
- Class Attendance Class attendance is extremely important (and mandatory). According to college policy, a student will be dropped once they miss 3.25 hours of class. For this reason, a student will be automatically dropped once they miss more than 3 class periods. If you will miss class for any reason, please notify me immediately. Please note that work missed due to an absence cannot be made up for any reason; if you are going to be absent when a major assignment is due, you are responsible for turning it in ahead of time. You are also responsible for any information covered in class the day you were absent. Labs must be completed in class.
- Canvas Use of Canvas is required to complete weekly reviews and submit your final paper. Notes, handouts, and other additional resources may be found on the class website. Your course grade will also be updated there for you to see. Please visit it. If you have questions on how to do so, e-mail me.
- Classroom Behavior One of the most important aspects of a classroom environment is that students feel comfortable to share ideas and ask questions. To this end, you are expected to respect your fellow students, even if you disagree with their opinions. Additionally, you are encouraged to answer questions posed by your classmates and engage in meaningful, courteous discussion with them. In the event that you are disrupting this environment in any way, you will be asked to leave the class. No missed work due to inappropriate classroom behavior can be made up and continued misbehavior will result in referral to the college disciplinary officer. Lastly, please turn off all electronic devices during class. Use of these devices during class is prohibited and ultimately will only have negative consequences for your grade in the class.
- Accommodations All effort will be made to accommodate students who need assistance.
 Please contact the Disabled Student Services and Programs (DSPS) and notify me of your requested services.
- Expectations —College students rank "self-motivation" as the most important reason they learn in any class. As your instructor, I am here to create an environment where you will be actively engaged in course content in order to fully comprehend concepts, as opposed to memorizing materials. In return, I expect that, as a student, you will come to class with an open mind, ready and willing to participate in discussion and activities, and ask questions at any time should something be unclear. I also expect you to invest time in your own learning and complete assignments to the best of your ability.



Description of Course Assignments

(Additional details to be posted on Canvas)

Research Project

There is no better way to learn about experimental psychology than to develop your own research project. The research project you complete for this class will have two parts: (1) an oral presentation and (2) a research paper.

After completing this research project, you will be able to:

- Think critically about topics in psychology;
- Develop a sound research question;
- Create your own method to measure a behavior of interest;
- Analyze psychological data;
- Report your findings.

Oral Presentation of Research (100 points)

As an individual or as a team (4 maximum), you will complete the following:

- Identify a topic of interest (some behavior you are interested in knowing more about);
- Generate a research question;
- Identify and operationalize variables;
- Develop a method to measure the behavior in question;
- Create an informed consent to abide by research ethics (if applicable);
- Perform the study;
- Analyze the data from your study;
- Report your findings.

Individual Research Paper (100 points)

After completing this research paper, you will be able to:

- Discuss in detail the major findings from research in your chosen area;
- Use the internet and library to find peer-reviewed research journal articles;
- Critically analyze research articles;
- Integrate other researcher's ideas into your own (without plagiarizing);
- Communicate research findings and present your own ideas in a clear and consistent way (according to APA format).

The requirements for the research paper are as follows:

- Must be written according to American Psychological Association (APA) format;
- Must use at least 3 peer-reviewed journal articles;
- 5-7 pages (not including Title Page, Abstract, or References);
- Must be completed *individually*, not as a group;
- Must not contain any plagiarism.



Research Drafts and Peer Reviews

(3 drafts, 50 points each; 150 points total/3 peer reviews, 25 points each; 225 points total)

This portion of your grade is based on 3 rough drafts and 3 peer reviews. Throughout the semester, you will turn in rough drafts of your introduction, methods, and discussion sections of your final report. These are designed to help you make timely progress on your research project and to receive useful feedback on your writing. Detailed instructions for each will be provided in-class and at the course Blackboard site. *Late Assignments: NO LATE WORK WILL BE ACCEPTED FOR ANY REASON*

Lab Assignments (30 points each; 390 points total)

This portion of your grade is based on 13 of 15 possible lab assignments. Detailed instructions will always be provided at the time the assignment is given. *Late/Missed Assignments:* Because your score is calculated for only 13 of the 15 possible assignments, no make-up assignments will be given and no late assignments will be accepted. If you complete more than the 13 required lab assignments, 5 points for each extra assignment completed with a passing grade will be counted as extra credit toward your final grade (possible 10 extra credit points).

2-Phase Quizzes

(4 quizzes, 100 points each; 400 points total)

You will have four in-class multiple-choice quizzes over course material this term. Two-phase quizzes are designed to assess your ability to understand the class material, and also will encourage you to work productively with your colleagues. In the first phase of each quiz, you will complete the 25-question quiz on your own, in blue or black ink. When everyone is done, you will convene with group members and be given a red pen to use (or you may bring your own). This will start the second phase, where you will consult with your group members to learn from each other, and possibly earn some missed points back on wrong quiz answers.

Textbooks and notes are not to be used during any part of your work on these quizzes. Cheating during either quiz phase, but particularly during Phase 2, will result in an automatic grade of zero. Make-up quizzes will ONLY be given in the case of a documented emergency. Documentation must be provided and the quiz rescheduled (for a date not more than 1 week after the missed class period) within 48 hours of the missed class period. Make-up quizzes are only eligible for phase 1 of the quiz.



Class Schedule - Subject to change with notice

| Lab | | Lecture | Reading | |
|------|--|---------|--|-------------------------|
| 1/28 | Introduction Online Orientation | 1/30 | Library Orientation | Syllabus |
| 2/4 | Internet Detective | 2/6 | Goals and Methods of Psychology | Ch. 1 |
| 2/11 | Ways of Knowing Variables, Reliability, and Validity | 2/13 | Creating Research Topics | Ch. 2 Ch. 5 Ch. 9 |
| 2/18 | Holiday – No Class! | 2/20 | 2-Phase Quiz #1 | |
| 2/25 | Hypothesis Generation and Testing | 2/27 | Selection of Variables, Operational Definitions, and Measurement | Ch. 6 Ch. 7 |
| 3/4 | Ethics | 3/6 | Initial Research Design | Ch. 3 |
| 3/11 | Selection and Assignment of Participants | 3/13 | 2-Phase Quiz #2 | Ch. 8 |
| 3/18 | Writing Reports and APA Format | 3/20 | Data Collection | Ch. 15 Appendix |
| 3/25 | SPRING BREAK! | 3/27 | NO CLASS! | |
| 4/1 | Working with Raw Data | 4/3 | Introduction Rough Draft & Peer Review | Ch. 14 |
| 4/8 | Between/Within Subjects Designs | 4/10 | Methods Rough Draft & Peer Review | Ch. 10 Ch. 11 |
| 4/15 | 2-Phase Quiz #3 | 4/17 | Discussion Rough Draft & Peer Review | Ch. 12 Ch. 13 |
| 4/22 | Non-Experimental Research Methods | 4/24 | Non-Experimental Research Methods | Ch. 4 |
| 4/29 | Psych Science | 5/1 | Final Paper Due Presenting Orally | |
| 5/6 | Group Work | 5/8 | 2-Phase Quiz #4 | |
| 5/13 | Psych Science Popular Report | 5/15 | Presentations | |
| 5/20 | Presentations | 5/22 | Last Day of Class | |