

Psychology 303: Research Methods in Psychology

Fall 2012

Lecture

Instructor: Kim Martin, MS
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Office Hours: Tuesday 10:00-noon and by appt. in 344 Straub
Lecture: TR 8:30-9:50am (Straub 146)

Lab

Brianna Hailey
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Office hours: Wednesdays 10-11am
Labs: R 4-5:20pm (Straub 180)

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Labs: R 10-11:20am (Straub 180)

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Office hours: Fridays 8-10am
Labs: R 12-1:20pm (Straub 180)
R 2-3:20pm (Straub 180)

Course Description

This class is a foundation course for the scientific study of psychology. Throughout the term, you will learn how to test scientific hypotheses, design experiments, evaluate research conclusions, and conduct your own research studies. In many psychology courses, you learn *what* human behavior is or *why* it occurs, but this class teaches *how* to study human behavior and arrive at those conclusions, and how to think like a psychologist. The material we will cover in this course will provide you with the ability to design research studies, conduct proper analyses to test the predictions of a study, and to critically infer what conclusions can be made based on the design and analyses of a study.

These skills will provide a basic foundation in scientific methodology if you choose to complete an honor's thesis in your junior or senior year or go on to graduate study in psychology. In addition, this course will teach you how to evaluate the validity of others' research, which if not properly understood, can often be misleading. Science is often concerned with the pursuit of truth, and in the study of psychology, it is this course that teaches you how to pursue it regardless of whether you pursue a career in psychology.

Additionally this course will help prepare you for 400 level psychology courses.

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Course Pre-Requisites

- *Psy 201 and/or 202*: Familiarity with basic psychological concepts is essential.
- *WR 122 or 123*: To focus on APA style writing we expect that you have passed the introductory writing requirement
- *Psy 302*: Successful completion of Psychology 302 (Statistics) is an absolute pre-requisite for this course. We assume you have a working knowledge of basic statistics. We will review important statistical concepts as they apply to conducting, analyzing, interpreting, and reporting research results, but this should not be new material for you.

Course Books

Required Book (1):

Cozby, P., & Bates, S. (2012). *Methods in Behavioral Research* (11th ed.). New York: McGraw-Hill.

The textbook, *Methods in Behavioral Research*, is an excellent book that is very user-friendly. We will refer to it often in class and the readings will make a thorough supplement to what we discuss in both lecture and lab. We shall set a very steady pace throughout the term, often covering multiple chapters a week, so please keep up with the readings as they will make our discussions in class much more lively and informed.



In addition, the publisher of the text maintains an on-line learning center for students with quizzes, flashcards, chapter outlines, exercises, and additional links for relevant concepts. You are encouraged to use the site for supplemental material, studying, and exam preparation. The website can be found at: www.mhhe.com/cozby11e

Additional Required Course Materials (1):

Aplia (online course learning software from Cengage; see 'Aplia' section below for additional details). Access may be purchased online directly from the website.

Recommended Book (1):

American Psychological Association. (2009). *Publication Manual of the American Psychological Association* (6th ed.). Washington, D.C.

- *Recommended for psych majors, especially those interested in graduate school*
- *Make sure to get the second printing of the 6th edition*

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Aplia

Aplia is an online software package that provides additional course resources, including practice problem sets (i.e., non-graded), graded problem sets (i.e., homework), and study materials. All graded problem sets will be taken online through Aplia. A benefit in using this software is that on both practice and graded problem sets, feedback is provided as to why an answer is either correct or incorrect. It is strongly recommended that you spend time reviewing this feedback, as this will ensure that you have adequately grasped that corresponding topics, which will be crucial to doing well in this course as we will tend to build upon topics as the course proceeds (e.g., it is necessary to understand the fundamentals of basic experimental designs before progressing to complex experimental designs).

Registration:

- 1) **You can access the online Aplia site here (note that you will first need to register on the site):** <http://www.aplia.com/>
- 2) If you already have an account, sign in and enter the course key **(LYRS-JA7X-QH66)** in the box provided and click the 'Register' button. If you don't have an account, click the 'Create a New Account' button, enter the course key **(LYRS-JA7X-QH66)** when prompted, and continue to follow the on-screen instructions. Note that the name of the Aplia course is 'PSY 303, Gravetter and Babbie Custom, Fall 2012'.
- 3) Access to the Aplia course can be done online (from the CengageBrain website) or through the UO bookstore. After paying, you will have the option to purchase a physical book at a discounted price, however, this is NOT NECESSARY, as we will be using a different textbook for the course (Cozby, 11th edition), which can also be purchased from the bookstore.

Course Expectations and Overview

Attendance and Participation: The course includes lecture meetings and a weekly lab. Attendance and participation in lectures and labs will be an essential part of your success in this course. Small group discussions will be a component of class lectures, along with several class activities that make up part of your grade. In addition, lecture may cover material from outside of the readings. You are responsible for all material.

Work: Doing well in this class requires an active involvement with the course content; merely reading the material and showing up for class are not enough. It is important to *think* about what you are reading, watching, and discussing, and *relate* it to experiences in your own life, rather than just remembering facts. As a 4-credit class, you are expected to spend 12 hours per week *outside of class* working on relevant material.

Preparation: It is expected that you will come prepared to class. This means keeping up with the readings, as well as having spent time reflecting on them. You will not do well on exams and in-class activities if you do not keep up with the reading. We also require that you check your

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UO email and the Blackboard website often (a minimum of once a day during the week), as we will post important class information. This course has been designed to comply with the psychology department's guidelines for teaching and learning:

<http://psychweb.uoregon.edu/undergraduates/guidelines>.

Organization and communication: Your success in this course will rely in large part on your ability to stay organized and on top of due dates. Check the syllabus often for important due dates. You will receive numerous handouts that you must keep track of, so create a system to organize lab and lecture materials. You should expect to be in frequent communication with your class and lab instructors, as well as with your classmates. If you are not already in the habit of checking e-mail every day, start now!

Student Accommodations

Students with Disabilities: If you have a documented disability and anticipate needing accommodations in this course, please let me know. Also, please request that an adviser at the Accessible Education Center send me a letter verifying your disability and needs for this course. The phone number for the Accessible Education Center is 346-1155 and the email address is uoaec@uoregon.edu.

Students for Whom English is Not Their Native Language: Foreign language dictionaries are permitted during exams. Exams will take approximately 40 minutes. However, if you find that you need additional time to complete the exam, please make arrangements with me ahead of time.

Other Students: If you are repeating this class, or have other circumstances that might affect your ability to participate in the class, please let me know so we can discuss strategies to promote your success.

Course Policies

Email Communication: All emails from your instructors will be made to your @uoregon.edu webmail account, so make sure to check this email account often (once a day on weekdays). You are encouraged to communicate with your instructors via email. Please communicate respectfully, as if you were speaking in person to the person whom you are contacting, and allow a minimum of 24 hours before expecting a response. Instructors may not be able to respond to emails outside of regular business hours.

Academic Honesty: Group activities will be a big part of lab, and discussion outside of class is encouraged. However, all written work submitted in this course must be your own and produced exclusively for this course. Although some aspects of the research projects require group work (in-lab exercises, design, data collection and analysis), *group collaboration on the worksheets and research papers is absolutely prohibited*.

We will not tolerate cheating or plagiarism. Cheating is defined as providing information to, or receiving information from, another person on an exam or other assignment. Plagiarism is

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defined as passing off the work of another as your own, without properly giving credit. This includes, but is not limited to, directly copying others' writing (in whole or in part) or paraphrasing others' writing or ideas without citing properly.

The UO library has a helpful page describing when to cite a source:

<http://libweb.uoregon.edu/guides/plagiarism/students>. All instances of cheating and plagiarism will have serious consequences and may result in your failure of the class.

Course Components & Requirements

Lecture: The lecture sessions will include review of selected textbook material, information relevant to the research projects and papers, elaboration of some topics with information not provided in the textbook, and in-class small group activities. You are expected to take responsibility for what is covered in class. The most important way to do this is to show up and be an active participant in lecture. Lectures slides will be posted on Blackboard. Note that these slides serve to *outline the lecture and are by no means comprehensive*. You should not rely on these slides for your course notes; rather, you should use them to organize the notes that you take during class.

Activity Assignments: Throughout the term, an in-class activity will be assigned for you to complete. No preparation is required, and each Activity Assignment is due at the end of class that day. Activity Assignments cannot be made up.

Aplia Problem Sets: Each week, you will complete a graded problem set through the Aplia website (problem sets are listed under the 'home' tab) worth 3% of your grade. You will have the opportunity to take each problem set up to three times, where your average score will constitute your final score on a given problem set. Each problem set (for a given week) is due on Sunday by 11:00PM and cannot be completed after the date it is due. Note that once you start working on a problem set, you can always come back to it and finish it at a later time (by hitting 'Save and Continue') as long as it is before the due date. When you have finished a problem set, click the 'Grade it now' button in order to submit your responses for a grade (and subsequent feedback). You then have the option to continue to the next problem set or to take the previous problem set again (up to a maximum of three times, where your grade for that problem set is the average score from the three attempts). Note that while each Aplia problem set is graded based on a relative amount of points (e.g., the problem set for week 1 may be graded out of 64 points), your final grade on this component of the course will be weighted by 3% calculated from the total points possible (e.g., if your total on all problem sets is 850/980 points (86.7%), the amount of points you earn towards your final grade would be $86.7 \times .03$, which is 2.6% with a maximum possible of 3%).

Exams: There will be two exams throughout the term, 1 midterm and 1 final (see Course Calendar for specific dates). Each exam will cover the textbook chapters listed in the course calendar in addition to the lecture material we covered in class. The exams will consist of multiple-choice and short answer questions. Each exam will be worth 100 points and the final exam will be comprehensive. You will not need to bring scantron forms.

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Lab Work: The lab component of the course will give you hands-on experience in conducting, analyzing, and writing up your own research studies. The majority of lab points will be based on successful completion of homework assignments and papers that are conducted through the term in lab. The first is a theoretical paper in which you will review the past research on a topic in psychology, and make correlational predictions about the relevant variables based on your review.

The second paper will be based on a correlational study that each lab will conduct using measures of the relevant variables from the first paper. Each student will administer these measures to five people (e.g., friends and family members) and, as a lab, the results will be analyzed and written up in an APA style paper.

The third paper will be based on an experiment that each lab will conduct using similar means of data collection. Again, the results of the experimental data will be analyzed and written up in an APA style paper. All papers will be turned in via SafeAssign on Blackboard.

***Homework Policy:** 75% max up to 1 day late; 50% up to 2 days late; Not accepted after 2 days. This applies to all coursework assigned.

Course Point Breakdown

Lecture (55%)

Pretest 1%
 Aplia Problem Sets: 3%
 Activity Assignments: 1%
 Midterm Exam: 25%
 Final Exam: 25%

Lab (45%)

Lab Participation & Homework 5%
 Literature Review Paper: 10%
 Correlational Study Paper: 15%
 Experimental Study Paper: 15%

Course Grading

In general, written work in this course will be graded based on form (i.e., proper APA formatting, spelling, grammar, sentence structure, length), critical thinking (i.e., how well you display knowledge of the material, how well you have analyzed and evaluated the material, and how well you effectively communicate the information), and the assignment criteria that are outlined in each assignment (i.e., completing all aspects of the work assigned based on the instructions and guidelines of the assignment). The final grade assigned for the course should reflect the student's overall performance in the course, as a percentage of total possible points earned and assigned a letter grade:

GRADE	PERCENTAGE		GRADE	PERCENTAGE
A+	99-100%		C	72-77.9%
A	92-98.9%		C-	70-71.9%
A-	90-91.9%		D+	68-69.9%
B+	88-89.9%		D	62-67.9%
B	82-87.9%		D-	60-61.9%
B-	80-81.9%		F	59.9% and Below
C+	78-79.9%		Pass	70-100

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Course Calendar for Lecture & Lab (subject to change)

Week	Date	Lecture Topic	Aplia Problem Set	Text
1	T ~ Sept 25	Course Overview; Pretest	Introduction to Aplia (Practice)	
	R ~ Sept 27	A Scientific Understanding of Behavior	1 Human Inquiry & Science; 2 Reading & Writing Research	CH. 1
	R ~ Sept 27 Lab 1: (Selection of Research Topic) PsycINFO & Google Scholar- Find 3 articles Homework: Article Summary (due via SafeAssign: Mon 10/1/12 by 11:59pm)			
2	T ~ Oct 2	Hypotheses / Theories	3 Paradigms, Theory, Research	CH. 2
	R~ Oct 4	Ethical Research	4 Ethics & Politics of Research	CH. 3
	R ~ Oct 4 Lab 2: Writing APA style papers – (bring articles to class) -Title page - References – Citations & Lit Reviews Homework: Paper 1: Literature Review Paper (due via SafeAssign: Wed 10/10/12 by 11:59pm)			
3	T ~ Oct 9	Survey Research	5 Survey Research; 6 Sampling Techniques	CH. 7
	R~ Oct 11	Reliability & Validity	7 Conceptualization, Operation & Measurement	CH. 5
	R ~ Oct 11 Lab 3: Correlational Study Guidelines and Activity; Questionnaire Activity			
4	T ~ Oct 16	Studying Behavior; Correlational Studies	8 Correlation & Regression	CH. 4 (65-76)
	R~ Oct 18	Description and Correlation	9-11 Frequency Distribution Central Tendency Quantitative Research	CH. 12
	R ~ Oct 18 Lab 4: Writing APA style papers Abstract and method sections Homework: Data Collection -5 participants (due: Sunday 10/21/12 by 11:59pm)			
5	T ~ Oct 23	Midterm Review		
	R~ Oct 25	Midterm Exam		
	R ~ Oct 25 Lab 5: Descriptive Statistics and Reliability Analyses			

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Week	Date	Lecture Topic	Aplia Problem Set	Text
6	T ~ Oct 30	Observing Behavior; Case Studies	12 Qualitative Field Research; 13 Unobtrusive Research	CH. 6
	R~ Nov 1	Experiments; Types of Validity		CH. 4 (76-89)
	R ~ Nov 1 Lab 6: Correlational Analysis; Writing APA style papers: Results and Discussion Sections Homework: Paper 2: Correlational Paper (due via SafeAssign: Wed 11/7/12 by 11:59pm)			
7	T~ Nov 6	Experimental Design	14 Experiment	CH. 8
	R~ Nov 8	Conducting Experiments	15 Research Design	CH. 9
	R ~ Nov 8 Lab 7: Selection of Topic for Experimental Study Article Summaries Homework: Article Summaries (3) (due: Thurs 11/15/12 by 11:59pm)			
8	T ~ Nov 13	Complex Experimental Designs Quasi Experimental Designs	16 Evaluation of Research 17 Analysis of Variance	CH. 10
	R~ Nov 15			CH. 11
	R ~ Nov 15 Lab 8: Measurement Activity; APA style papers: Intro and Method Sections Homework: Data Collection -5 participants (due: Mon 11/19/12 by 11:59pm) Article Summary Peer Review (due: Wed 11/21/12 by 11:59pm)			
9	T ~ Nov 20	Statistical Inference	18 Statistical Analyses 19 Hypothesis Testing	CH. 13
	R~ Nov 22	Holiday No Class		
	R~ Nov 22 Lab 9: Holiday No Lab			
10	T ~ Nov 27	Generalizing Results; External Validity	20 Probability	CH. 14
	R~ Nov 29	Final Exam Review		
	R~ Nov 29 Lab 10: Descriptive Statistics and Group Differences Analysis; Results & Discussion Section Homework: Paper 3: Experimental Study Paper (due via SafeAssign: Tues 12/4/12 by 11:59pm)			
FINAL	R~ Dec 6	FINAL EXAM, Dec 6th at 08:00 AM in 146 STB		

****No work of any kind will be accepted after the Final Exam on 12/06/12****

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