

Psychology 303: Research Methods in Psychology

Summer 2013

Lecture

Instructors: Devin Howington, M.S. Brianna Hailey, M.S.
E-mail: deh@uoregon.edu bhailey@uoregon.edu
Office Hours: MW 1:00-2:00pm (232 FRANKLIN) TR 12:00-1:00 PM (426 LEWIS)
from June 24-July 22 from July 23 - August 14
Class Time/Location: MTWR 11:00-11:50AM (260 CONDON)

Lab

Job Chen, M.S.
E-mail: zhuochen@uoregon.edu
Office: 210 FRANKLIN
Office hours: Thursdays and Fridays 9:00-10:00am
Labs: F 11-11:50am (271 FRANKLIN); F 12-12:50pm (271 FRANKLIN)

Course Description

This class is a foundation course for the scientific study of psychology. Psychology majors must learn the content of psychology (e.g. cognitive psychology, psychology of gender), but they also must learn *how* psychologists know what they know. Research Methods is a critical thinking skills class in which the main goal is to help you learn how to systematically evaluate the validity of different claims that you might encounter in a future psychology textbook, in a psychology research article, in the media, or in casual conversation. In addition, this class will teach you how to ask and answer your own questions about human behavior by designing psychological research that can test different claims.

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 participation grade. All assignments and in-class exercises are designed to maximize your learning of the following goals. By the end of the course, we hope you will be able to:

- Identify research claims in both popular and scientific sources and classify them as frequency, association, or causal claims.
- Use a framework of the “four big validities” (construct, internal, external, and statistical) to ask systematic questions about the evidence behind different research claims.
- Evaluate whether psychologists have measured human behavior reliability and with validity.
- Discriminate between experimental, quasi-experimental, and correlational studies and explain which claims (association or causal) each kind of study can support.
- Design experiments that study how different factors interact to cause human behavior.
- Explain how researchers can improve the ability of correlational studies to support causal claims.

- Describe when we can generalize from the results of a study and when generalization doesn't matter.
- Critically reflect on potential biases, values, and assumptions about human behavior implicit in the scientific study of psychology.
- Practice ethical decision-making in the design of psychology research.
- Learn how to find and interpret scientific writing about psychology (e.g. peer-reviewed journal articles).
- Write about psychology research following the APA style and formatting guidelines.

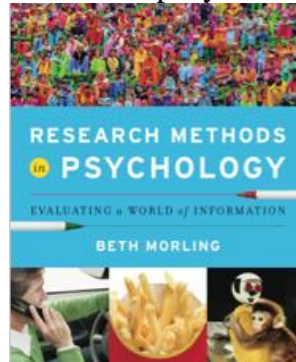
Course Pre-Requisites

- *PSY 201 and 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*: We assume you have completed PSY 302 (Statistics) with a working knowledge of hypothesis testing and basic statistical tests such as *t*-tests, chi-square, and ANOVA.

Course Books

Required Book:

Morling, B. (2012). *Research methods in psychology: Evaluating a world of information* (1st ed.). New York: Norton & Company.



The textbook, *Research Methods in Psychology*, is an excellent book that is very user-friendly. You can purchase the book at the Duck Store or you can check out the book from course reserves at Knight Library. The condensed, 4x-weekly lecture schedule of the summer term requires us to set a steady pace, often covering multiple chapters per week. 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 online 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: <http://wnorton.com/college/psych/research-methods-in-psychology/>

Recommended Book:

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, D.C.

- Recommended for psych majors, especially those interested in graduate school, and for students that want to get ALL the info on APA formatting in one book.
- Make sure to get the latest printing of the 6th edition.

Course Components

Readings: Each day there will be **required** reading assigned from the Morling (2012) textbook, *Research Methods in Psychology*, to be completed prior to lecture (labeled Ch. 2, Ch. 3, etc., on the schedule). Lecture and discussion will be formatted to complement and expand on this reading rather than repeat the topics verbatim. Towards this goal, there will be 1-2 clicker questions at the beginning of class that cover reading comprehension; these questions will be graded for correctness (see Clicker section for more details). In addition to the textbook, several required psychology research articles and other readings on APA-style writing in psychology are assigned, with due dates listed in the course schedule at the end of the syllabus. Readings listed as “TBA” will be made available to students on Blackboard at least a week prior to their due dates; announcements will be made in class and via Blackboard announcement when TBA readings are posted.

Clickers: Each day there will be **1-2 reading questions** about the assigned reading (Morling, 2012). These questions will be graded for correctness.

Each day there will also be **several participation questions** meant to spur discussion or collect information about your understanding of a topic. These are graded for completeness. In order to allow for bathroom breaks, clicker malfunction, and general day-dreaming you may miss one participation question per day and still get full participation points that day. In calculating final participation points for the class (15% of your final grade), we will drop your lowest clicker score. This means you can miss one day of lecture without losing participation points.

i>Clicker 2’s are available for purchase at the Duck Store for \$43.25 and can be sold back to the Duck Store at the end of the term for \$21.75. i>Clicker 1’s can be purchased at the Duck Store too but cannot be sold back. Please register your i>Clicker (versions 1 or 2 are acceptable) on Blackboard by **Thursday, June 27 @ 11:00 A.M.**

Exams (Lecture): There will be **three mandatory exams** (50 mins each, non-cumulative) throughout the term as well as an **optional cumulative final exam** on Thursday, August 15, at 10:15 A.M. Exams will be used to assess your mastery of the lecture and reading material. Exam formats may include multiple-choice and short-answer questions.

NOTE: ***Your final exam grade may replace your lowest grade on the first three exams.*** There will be no makeup exams. If you are sick or out of town and miss an exam, the final exam will replace the zero earned for the missed exam. The final exam cannot be made up. Please check the dates and times of all exams before preparing any travel plans.

Research Proposal Assignment (Lab): The lab component of this course will help you to develop and write a research proposal of an experimental research study. Possible research topics include social exclusion, mindfulness, stereotype threat, and others. This project will consolidate what you learn about research methods in lecture into one project. Your research proposal will be

an **APA-style paper** that includes a title page, abstract, introduction, method, results, discussion, and references sections. Deadlines for distinct components of the project are spread out across the term. A final draft of your research proposal paper will be **due Friday, August 16 @ 11:00 A.M.** All components of the assignment will be submitted via Blackboard's "SafeAssign." SafeAssign detects duplicate text found on the internet, in published documents, and in your peer's submissions. Please be smart about your submissions and make sure you are submitting original work (see Academic Honesty section below). More details on the research proposal assignment are available in the handout on Blackboard. Please e-mail your lab or lecture instructors with any questions about this project as soon as they arise.

Extra Credit: We are offering optional extra credit points for students to **participate in research** studies in the Psychology Department. Participating in psychology research can help to illustrate the concepts we discuss in the course. You can earn up to 10 points of extra credit (2% of your final grade in the course) by participating in up to two hours of psychology research. To participate in experiments, you can sign up via the online scheduling site SONA: <http://uopsych.sona-systems.com>. The Human Subjects Coordinator, Bill Schumacher (hscoord@uoregon.edu), can answer your questions about SONA. The deadline for optional research participation for extra credit is 11:00 A.M. on Wednesday, August 14, the last classroom day of the course.

In addition, if you find any APA formatting mistakes in the course materials that we provide you in this class, you can earn extra credit by pointing out the mistakes to us (1 point per APA style mistake, counted toward your final grade in the class-- first student who finds the mistake gets the point).

Course Policies

Mandatory Attendance: Students who do not attend the first two lectures on June 24 and June 25, 2013, may be directed by the academic department to drop the course so that the seat may be given to another student. Students are responsible for dropping the class; there is no automatic drop. The university refund schedule applies. Of course, this is the policy as the registrar's office is concerned. All participation policies still apply.

Academic Honesty: 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 (e.g. in-lab exercises) and discussion outside of class is encouraged, *group collaboration on the worksheets and research papers is absolutely prohibited—the work you turn in on homework and papers must be solely your own.* Otherwise, you will not adequately learn the material.

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 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. In these cases "others" can include other students in the class, other students or non-students not in the class, and authors of scholarly or mass media work (journal articles, chapters, newspaper articles, blogs, Wikipedia).

More details on all the things that are considered plagiarism will be discussed in Lab 1. The UO library has a helpful page describing when to cite a source:

<http://library.uoregon.edu/guides/plagiarism/students/index.html>. We recommend <http://plagiarism.org> as another great resource for all things related to plagiarism. All instances of cheating and plagiarism will result in a **zero** on that assignment and may result in failure of the class and a report to the Student Academic Misconduct (at our discretion).

Late Assignment Policy: A letter grade (10%) will be deducted for assignments turned in after the deadline, and will increase another 10% for every 24 hours that an assignment is late. Late work will not be accepted more than 3 days after an assignment deadline.

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 respond to emails on weekends or weekdays between 7pm and 8am.

Accessibility: It is our hope, as your instructors, to create an inclusive learning environment in lab and lecture—for all students, including students with disabilities. Although it is not possible to anticipate all individual needs, it is important to us to eliminate barriers to students' full participation where possible. Please help us accomplish this goal by communicating directly with your instructors (Hailey, Howington, and Chen) if you anticipate (or encounter later in the term) barriers to full participation. If you have a documented disability or a non-documented need for accommodations to help meet your learning needs, please communicate with each of us as soon as possible.

If you have a notification letter from the Accessible Education Center that outlines appropriate accommodations and confirms that you are registered with the AEC, we welcome you to provide us with this letter as soon as possible and discuss your needs further with us in person. These conversations are confidential.

If you do not have a notification letter and want to utilize the support and services offered by the Accessible Education Center, please schedule an appointment with an AEC adviser by phone (541) 346-1155, email uoaec@uoregon.edu, or visit the AEC office in 164 Oregon Hall.

Students for Whom English is Not Their First Language: Foreign language dictionaries are permitted during exams. Please contact your instructors as soon as possible if you have any questions or concerns.

Grading

In general, written work in this course will be graded based on form (i.e. spelling, grammar, sentence structure, APA style), understanding (i.e. an understanding of the information and ideas presented in the course), critical thinking (i.e. how well you have analyzed and evaluated the material), 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). Point values for lab and lecture components are listed below.

<u>Lecture (60%)</u>	<u>Points</u>
Three Exams (75 points each)	225*
Participation (Clickers)	75
*Optional, cumulative final exam can replace lowest exam grade	

Lab - Activities and Assignments (20%)

Article Summary	15
Measurement Activity	10
Research question, hypotheses, 3 articles	10
Introduction section of research proposal	25
Method section of research proposal	25
Peer Review	15

Lab - Final Paper (20%)

Research proposal paper	100
-------------------------	-----

Total Points Possible **500**

Course Schedule (subject to minor changes)

Note: All assignments should be submitted to Blackboard by their due dates unless otherwise stated.

Date	Class content	Readings	Assignment Due
WEEK 1			
M ~ June 24	Introduction and Course Overview	Ch. 1	
T ~ June 25	Theories & hypotheses	Ch. 2	
W~ June 26	Three Claims, Four Validities Framework	Ch. 3	
R ~ June 27	Review/practice of Three Claims, Four Validities	Ch. 3	DUE @ 11AM: Rankings of research proposal topics. ALSO: Register your clicker
F ~ June 28	LAB: Finding the proper sources (PsycINFO); summarizing research articles; preventing plagiarism.		
WEEK 2			
M ~ July 1	APA Style	Read: APA style document (See	

Blackboard)			
T ~ July 2	Generating Research Questions		
W~ July 3	Good Measurement - Construct validity	Ch. 5	DUE @ 11AM: Article Summary for target article
R ~ July 4	NO CLASS		
F ~ July 5	NO LAB		
WEEK 3			
M ~ July 8	Good measurement - Reliability	Ch. 5	
T ~ July 9	EXAM 1		
W~ July 10	Surveys and sampling procedures	Ch. 6	
R ~ July 11	Experimental design - manipulation of IV and measurement of DV	Ch. 9	
F ~ July 12	LAB: Introduction and measurement - Research question, hypotheses, select IV and DVs, operationalization of variables.		DUE @ lab: Bring to lab 3 supporting articles, research question, & hypothesis.
WEEK 4			
M ~ July 15	Experiments - internal validity and the three rules for causation	Ch. 9	
T ~ July 16	Experiments - threats to internal validity	Ch. 10	
W~ July 17	Experiments with more than one IV (2x2 factorial designs; moderation)	Ch. 11	
R ~ July 18	More Factorial designs	Ch. 11	
F ~ July 19	LAB: Experimental design of research proposal- Methods		DUE @ 11AM: Intro section
WEEK 5			
M ~ July 22	EXAM 2		
T~ July 23	Some things you can't manipulate: Quasi-experimental designs I	Ch. 12	
W~ July 24	Quasi-experimental designs II	Ch. 12	
R~ July 25	And justice for all? Ethical decision making in psychology	Ch. 4	

F ~ July 26	LAB: APA-style Results and Discussion sections.	DUE @ 11AM: Method Section
WEEK 6		
M ~ July 29	Introduction to bivariate correlations	Ch. 7
T ~ July 30	Interrogating Association Claims	Ch. 7
W ~ July 31	Multivariate Correlations	Ch. 8
R ~ Aug 1	Mediators	Ch. 8
F ~ Aug 2	LAB: APA-style Title Page, Abstract, Formatting	
WEEK 7		
M ~ Aug 5	Interrogate published research with 4 validities framework	reading TBA
T ~ Aug 6	Generalizing results	Ch. 13
W ~ Aug 7	When participants are W.E.I.R.D*, who gets excluded?	reading TBA
R ~ Aug 8	Interrogate a guest researcher's validities	none
F ~ Aug 9	LAB: Peer review of research proposal papers	DUE @ lab: Bring to lab full draft of paper for peer review.
WEEK 8		
M ~ Aug 12	TBA	reading TBA
T ~ Aug 13	EXAM 3	
W ~ Aug 14	Review Day - Bring questions!	
R ~ Aug 15	FINAL EXAM [‡] (optional, cumulative) at 10:15AM	location TBA
F ~ Aug 16		DUE @ 11AM: Final research proposal paper - including title page, abstract, intro, methods, results, discussion.

*W.E.I.R.D = Western, educated, industrialized, rich, democratic

[‡] Remember: The optional, cumulative final exam can replace your lowest grade on the first three exams in the course. If you missed one of the first three exams for illness or exceptional, unforeseen circumstances, you may take the final exam to replace the zero earned on the prior exam.