

# PSY 303: Research Methods in Psychology: Cognitive

Spring 2019

CRN: 35044

**Instructor:** Theodore A. Bell

**Email:** [tbell1@uoregon.edu](mailto:tbell1@uoregon.edu) **Office:** Straub 385

**Office Hours:** Mon 10:30-11:30, 1:00-1:50 Wed 10:30-11:30 & by appointment. **Please arrive at 11 for office hours.**

**Teaching Assistants for Spring 303 classes:** Jaime Yellowtail, Jennifer Lewis

**Course Meeting Times:** Tues/Thurs 12:00-1:20 **Location:** Straub 008

## Course Materials

### (1) Books (required)

American Psychological Association (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: APA. (Available at Duckstore)

Strunk, W., Jr., & White, E. B. (2000). *The elements of style* (4<sup>th</sup> ed.). New York: Longman. (Available at Duckstore)

### (2) PDF files on Canvas (required) <http://canvas.uoregon.edu>

Other course materials (handouts, assignments) will be posted on the Canvas site.

## Helpful resource on common errors in academic writing and how to avoid them (recommended)

Clark, H. H. (1999). Everyone can write better (and you are no exception).

<http://homepages.ed.ac.uk/martinc/msc/doc/hc.pdf>

## Course Description

This course will focus on building your skills as a *producer* of research. As you gain more insight into the research process, you will also improve your skills as a critical consumer of psychological research. The course emphasizes hands-on practice for building the skills you need to conduct your own research and evaluate the research of others. Using existing data sets collected by UO professors, grad students, or their colleagues, each student will develop hypotheses based on a review of relevant literature, analyze the data to test those hypotheses, and write up, revise, and present the results of that work in two reports. You will revise and improve your drafts based on feedback on your writing from instructors, fellow students, and peer tutors. The final written products will include a correlational research study and a related experimental or quasi-experimental research study. You will also collaborate with other students on two presentations: a summary of literature and a “future directions” research proposal in poster form.

This is the final course in the 301-303 foundation series. You will be building on the critical thinking skills that you practiced in PSY 301 and the data analysis skills that you gained in PSY 302 to design, implement, analyze, draw conclusions from, write up, and present scientific research in psychology.

This course may be repeated for credit a maximum of one time provided there is a change in topic.

## Topic Description for Cognitive Psychology

The topic of this section is Research Methods in Psychology: Cognitive Psychology. This section will emphasize research questions typical of cognitive psychology (e.g., How do we search information in different memory systems), finding literature in cognitive psychology journals, using research designs that are common in cognitive psychology (e.g., repeated-measures designs, factorial designs), working with data typical of cognitive psychology experiments (e.g., reaction time, neuroimaging, performance), and conducting appropriate statistical analyses (e.g., related-samples t-tests, correlations, and ANOVAs)

## Learning Objectives

- Literature review: Find psychological studies relevant to your topic, identify research questions and hypotheses in those articles, and critically evaluate the research design and quality of evidence presented.
- Conduct your own research: Generate research questions and hypotheses, choose and apply appropriate basic statistical analysis techniques for specific research questions and specific data sets.
- Analyze, interpret, and communicate your findings: Introduce the background literature on which your hypotheses are based, describe the methods, and summarize and discuss the results in an APA-style report.
- Collaborate: Working with others, develop an original research study using your own method and design.

## Student Workload

This course is worth 4 credits toward your degree, the equivalent of 120 hours of work across the term. You will spend 3 hours in class each week. The rest of the time will be spent completing homework assignments that develop the foundations for your writing assignments (2-5 hours each), final drafts of the two research projects (30 hours) and the two presentations (about 20 hours). The workload will be less at the beginning of the term, increase as we tackle lengthier writing assignments, and then peak towards the end of the term when you are conducting, analyzing, writing up, and presenting your research.

## Expectations and Grading

### Paper Assignments

The writing assignments in this course are scaffolded by the homework assignments so that by the time you are writing your final draft, you will have received feedback on each of the components of an APA-style research report. You will write up one study based on a correlational analysis, and one study based on an experimental or quasi-experimental analysis. The two papers must be written independently, but you are encouraged to seek out additional feedback on drafts from fellow students, friends, tutors, and instructors beyond what is already required by course assignments. If someone else writes the paper for you, however, or you plagiarize the writing of others, that's academic misconduct. ***Don't do it.***

### Homework

Assignments include generating hypotheses, reviewing research articles, providing feedback on other students' drafts, and turning in draft sections (introduction, methods, results, discussion) that will be revised and integrated into your final papers. Homework assignments are due at the start of class unless otherwise noted, and should be written independently (seeking feedback is fine). ***NOTE: Late homework assignments will earn half credit and will not be accepted beyond a week from the due date unless advance approval is negotiated with the instructor. Late peer reviews will earn no credit if they are no longer useful.***

### Consult 303 Peer Tutors

303 Peer Tutors, located in Straub 237A, are available to provide feedback on your drafts. They excelled in 303 themselves and have received extra training on how to help current 303 students improve their scientific communication skills. All students must consult a 303 tutor for feedback during Weeks 4-6, before turning in their final version of Paper 1. Email [psy303tutors@uoregon.edu](mailto:psy303tutors@uoregon.edu)

### Class Presentations

During the first part of the course, you will collaborate with other students to review and present relevant background literature for the correlational paper. During the last week of classes, you will present a future directions poster developed with one or more other students.

- Literature Review: Your presentation should include background information from two articles. It should emphasize the specific findings from the background literature and show how they relate to specific hypotheses for the correlational study.
- Future Directions Poster: Your poster should include relevant background information, your research questions or hypotheses, and details about the planned method for collecting data to test your predictions.

### Class Attendance and Participation

Regular attendance is essential for doing well in this course. Much of what you learn in this course will come from hands-on experiences and activities, including giving and receiving feedback on drafts of the papers.

Final grades in this course will be determined by the following:

- ◆ Homework + 303 tutor consultation: 15%
- ◆ Papers: 60% (25% correlational, 35% experimental)
- ◆ Presentations: 20% (5% lit review, 15% poster)
- ◆ Attendance/In-Class Participation, including in-class Peer Review: 5%

### **Grading**

Psychology department guidelines for the level of achievement required for each grade can be found here: <http://psychology.uoregon.edu/courses/department-grading-standards/> Grading cutoffs are as follows:

A	93-100%	B	83-86%	C	73-76%	D	63-66%
A-	90-92%	B-	80-82%	C-	70-72%	D-	60-62%
B+	87-89%	C+	77-79%	D+	67-69%	F	0-59%

### **Academic Honesty**

**All work submitted in this course must be your own.** The use of sources must be properly acknowledged and documented (*when in doubt, cite! If still unsure, ask!*), and although seeking feedback on drafts is required, you must write your papers yourself (no copying from other students, or having someone else write the paper for you). If I suspect academic dishonesty (cheating, plagiarism, etc.) I will contact you directly to discuss the issue, and will report it to the Office of Student Conduct and Community Standards unless the discussion convinces me that my suspicions are unwarranted. My preferred sanction is a failing grade for the paper or the course, depending on the severity of the violation. The Student Conduct Committee may decide on additional actions. If you are unclear about what constitutes academic dishonesty, see the Student Conduct Code: <https://studentlife.uoregon.edu/conduct>

## Special Accommodations

### Accessible Education Center (AEC)

If you have a documented disability and anticipate needing accommodations in this course, please meet with the instructor as soon as possible and request that a counselor at the Accessible Education Center ([uoaec@uoregon.edu](mailto:uoaec@uoregon.edu), (541) 346-1155) send a letter detailing what accommodations are appropriate. For a list of resources provided by the Accessible Education Center, see <http://aec.uoregon.edu>.

### If Writing Is a Particular Challenge for You

If you think you may have extra challenges with writing assignments, whether because English is not your native language or because your writing skills are weak for other reasons, please plan on consulting the writing tutors at the Tutoring and Learning Center (TLC) on the 4<sup>th</sup> floor of Knight Library. Drop in hours can be found here: <https://tlc.uoregon.edu/subjects/writing/>

## Homework Assignments & Course Schedule

HW = homework assignment; P1/P2 = papers; PRES = presentation

<b>Homework (15%)</b> <i>To be submitted via Canvas</i>		
HW1:	Choosing a Research Question & Finding Literature	P1
HW2:	Literature and Hypotheses	P1
HW3:	Draft Introduction & Method	P1
HW4:	Results Output, Write-up, & Draft Discussion	P1
HW5:	Peer Editing for Correlational Paper	P1
HW6:	Draft Abstract for Correlational Paper	P2
HW7:	Research Article Summaries, Reference List, & Hypothesis(es)	P2
HW8:	Experimental Results Output, Write-up, & Draft Discussion	P2
HW9:	Peer Edit for Experimental Paper	P2

## Course Schedule

Please refer to the following schedule to guide you through the course. Submit assignments on Canvas unless otherwise indicated. All due dates are also indicated on Canvas.

*HW = homework assignment; P = paper assignment, PRES = presentation*  
**All homework due thursdays at 11:59 pm unless otherwise specified "**

Week	Date	Class Topic and Activity	Assigned	Due
<b>1</b>	4/2	Syllabus, Introduction to Class Topic, Choosing RQs	HW1, P1	
	4/4	Finding research articles using PsycINFO and Google Scholar; APA Citations & References; Intro to Data Set	HW2	HW1 Due
<b>2</b>	4/9	Writing an Introduction, Literature as Empirical Evidence, Correlational Paper Guidelines	PRES1	
	4/11	Writing Intro & Method Sections, <b><u>Check Hypotheses</u></b>	HW3	HW2 Due
<b>3</b>	4/16	Group work on presentations		PRES1 Due
	4/18	PRES1: In-Class presentation of Literature Reviews	HW4	PRES1 Due HW 3 Due
<b>4</b> Tutor	4/23	Method Drafts + Peer Review, <b><u>Spotlight Workshops</u></b>	HW5	<b>Visit Tutors</b>
	4/25	Data Analysis & Results; Writing a Discussion		HW4 Due <b>Tutors</b>
<b>5</b> Tutor	4/30	Peer Assignments, <b><u>Spotlight Workshops</u></b>		<b>Tutors</b>
	5/2	Peer Feedback Sessions in Class, <b><u>Spotlight Workshops</u></b>		HW5 Due
<b>6</b> Tutor	5/7	Correlational Paper Abstract Writing & Appendix	HW6	<b>Tutors</b>
	5/9	Abstract Workshop and Peer Review		HW6 Due, P1 Due Friday

Week	Date	Class Topic and Activity	Assigned	Due
<b>7</b>	5/14	Introduction to Experimental Paper	<b>HW7, P2</b>	
	5/16	Experimental Data Analysis	<b>HW8</b>	<b>HW7 Due</b>
<i>Optional (recommended) Peer Tutor Consultations this week</i>				
<b>8</b>	5/21	Making Figures and Tables; Peer Review Assignments	<b>HW9</b>	<b>HW8 Due</b>
	5/23	<b><u>Spotlight Workshops</u></b>		
<i>Optional (recommended) Peer Tutor Consultations this week</i>				
<b>9</b>	5/28	PRES2 Groups formed; In class Peer Review	<b>PRES2</b>	<b>HW9 Due</b>
	5/30	Poster Workshop for PRES2, <b><u>Spotlight Workshops</u></b>		
<i>Optional (recommended) Peer Tutor Consultations this week</i>				
<b>10</b>	6/4	Writing workshop		
	6/6	PRES2: Poster Presentations & Peer Review		<b>PRES2 Due</b>
<i>Wed June 12 2pm: Submit <b>Paper 2</b> on Canvas: <b>DON'T BE LATE!!</b></i>				<b>*P2 Due*</b>

***Note: Changes may be made to this course schedule.***