

# **PSY 303: Research Methods in Psychology: Cognitive Psychology**

**Fall 2019**

CRN: 15324

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**Office Hours:** 10:00am – 11:00am, Tuesday and Thursday or by appointment

**Teaching Assistants:** Jamie Yellowtail

**Course Meeting Times:** 10:00am – 11:20am, Monday and Wednesday

**Location:** Straub 006

## **Course Description**

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 as you become a *producer* of your own research. Throughout the course, you will gain hands-on experience with the many steps of the scientific research process in psychology, including research design, implementation, analysis, interpretation, authorship, and the presentation of findings. As you gain more insight into the research process, you will also improve your ability to critically evaluate psychological research conducted by 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 report the results of this work in two reports. Students will revise drafts of their reports based on feedback 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. Students will also work collaboratively on two group presentations: a summary of literature and a “future directions” research proposal.

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

## **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, prepare and present scientific presentations in common formats (slide presentation and poster presentation).

## Topic Description for Cognitive Psychology

**Course Materials:** Note that most of the following resources are available online for free. We will discuss the exceptions briefly on the first day of class.

### Required:

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

Navarro, D. J., & Foxcroft, D. R. (2019). [learning statistics with jamovi: a tutorial for psychology students and other beginners](#). (Version 0.70). DOI: [10.24384/hgc3-7p15](#)

In this course, we will be using the same statistical software that is now used in PSY302 – Jamovi. This software is available for free and has an accompanying text book with clear step-by-step instructions for carrying out everything taught in 302 (in case you forgot). The text even includes a useful section (Chapter 3) about installing the software on your own computer and getting started. The textbook is here:

<https://www.learnstatswithjamovi.com>

The jamovi user manual and installation instructions are here:

<https://www.jamovi.org/user-manual.html>

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

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

### Recommended:

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

Purdue Writing Lab. (n.d.). Purdue OWL // Purdue Writing Lab. Retrieved September 9, 2019, from

[https://owl.purdue.edu/owl/purdue\\_owl.html](https://owl.purdue.edu/owl/purdue_owl.html)

This website includes several free writing resources. I recommend the main webpage ([https://owl.purdue.edu/owl/purdue\\_owl.html](https://owl.purdue.edu/owl/purdue_owl.html)) for an overview of the full content, the 'Research and Citations' section for guidance about conducting research (in the case of a literature review) and using research (how to: avoid plagiarism, format quotes, etc.), and the 'APA Style' section for detailed information about citations and references in papers, slide presentations, and posters.

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

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

This brief article (9 pages) lists 12 rules to follow when writing for psychological research contexts. Written by a psychologist for psychologists, the rules are organized around 3 broader principles – don't be pedantic, make your writing lively, and be professional.

McLean, S. (2015) *Writing For Success*. University of Minnesota Libraries Publishing.

<https://open.lib.umn.edu/writingforsuccess/>

This is an excellent, public-domain text that provides step-by-step writing instructions while building reading and critical thinking skills. It also contains sections on grammar review and

suggestions for specific writing skills like how to structure a paragraph and how to make your writing more interesting. It is long but useful for this course and beyond.

## 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

### Submitting Assignments (Papers, Homeworks, Class Presentations)

Assignments must be submitted on Canvas in the designated Canvas “Assignment”, unless otherwise noted on this syllabus. *Instructions for all assignments and due dates are clearly documented on Canvas. You are expected to track assignment instructions and due dates on Canvas.* Grading weights are as documented in this syllabus. All assignments must be submitted in a format that is readable by VeriCite. (To submit a PDF, you will need to “Save As” or “Export” as a .pdf formatted file. VeriCite is not able to read a PDF that has been created with a scanner.)

### Papers

The paper 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

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.* Canvas will automatically close assignments when they can no longer be submitted. It is your responsibility plan ahead and begin your weekly homework assignments ahead of time to avoid missing a due date as a result of last-minute unforeseen events.

### 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 proposal 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: Your proposal should include relevant background information, your research questions or hypotheses, and details about the planned method for collecting data to test your predictions.

**Note:** Students must attend their group presentation to receive a presentation grade. Group presentations will be submitted as a team. However, it is possible that I will individualize grading on these presentations, based on contribution and performance. More information about this will be included with the group project assignment instructions.

### 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% (10% lit review, 10% future directions)
- ◆ 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	83-86.9%	C	73-76.9%	D	63-66.9%
A-	90-92.9%	B-	80-82.9%	C-	70-72.9%	D-	60-62.9%
B+	87-89.9%	C+	77-79.9%	D+	67-69.9%	F	0-59.9%

### **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!*). 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/>

## Assignments & Course Schedule

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

Assignments			
HW1	Research Question, Articles & References, Hypothesis	P1	Week 1
PRES1	Presentation 1: Literature Reviews	PRES1	Week 2
HW2	Draft Introduction & Method	P1	Week 2
HW3	Correlational Results Output, Draft Write-up & Discussion	P1	Week 3
HW4	Peer Review for Correlational Paper	P1	Week 4
HW5	Draft Abstract for Correlational Paper	P1	Week 5
Paper1	Correlational Paper	P1	Week 5
HW6	Research Article Summaries, Reference List, & Hypothesis(es)	P2	Week 6
HW7	Experimental Draft Introduction & Method	P2	Week 7
HW8	Experimental Results Output, Write-up, & Draft Discussion	P2	Week 8
HW9	Peer Review for Experimental Paper	P2	Week 9
PRES2	Presentation 2: Future Directions	PRES2	Week 10
Paper2	Experimental Paper	P2	Finals

## 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 at 5pm unless otherwise specified**

Week	Date	Class Topic and Activity	Assigned	Due
<b>1</b>	09/30	<b>No Class</b>	<b>HW1</b>	
	10/02	Syllabus, Introduction to Class Topic, Choosing RQs, Intro to Data Set, finding research articles using PsycINFO and Google Scholar; APA Citations & References	<b>PRES1</b>	
<b>Sunday 10/06, 5pm</b>				<b>HW1 Due</b>
<b>2</b>	10/07	Correlational Paper Guidelines Writing an Introduction Writing a Methods Section	<b>HW2,</b>	
	10/09	PRES1: In-Class presentation of Literature Reviews		<b>PRES1 Due</b>
<b>Sunday 10/13, 5pm</b>				<b>HW2 Due</b>
<b>3</b> Tutor	10/14	Data Analysis & Results	<b>HW3</b>	
	10/16	Writing a Discussion; <b><u>Spotlight Workshops</u></b>		
<b>Sunday 10/20, 5pm: Selected students consult 303 Tutors this week</b>				<b>HW3 Due</b>
<b>4</b> Tutor	10/21	Peer Feedback Sessions in Class, <b><u>Spotlight Workshops</u></b>	<b>HW4</b>	
	10/23	Peer Feedback Sessions in Class, <b><u>Spotlight Workshops</u></b>		
<b>Sunday 10/27, 5pm: Selected students consult 303 Tutors this week</b>				<b>HW4 Due</b>
<b>5</b> Tutor	10/28	Correlational Paper Abstract Writing & Appendix	<b>HW5</b>	
	10/30	Abstract Workshop and Peer Review		<b>HW5 Due before class</b>
<b>Sunday 11/03, 5pm: Paper 1 Due; Selected students consult 303 Tutors this week</b>				<b>*P1 Due*</b>
<b>6</b> Tutor	11/04	Introduction to Experimental Paper Research Question and Literature Review	<b>HW6</b>	
	11/06	Hypotheses, references and methodological design		

<b>Sunday 11/10, 5pm</b>				<b>HW6 Due</b>
<b>Week</b>	<b>Date</b>	<b>Class Topic and Activity</b>	<b>Assigned</b>	<b>Due</b>
<b>7</b>	11/11	In-class workshop: Introduction and Methods	<b>HW7</b>	
	11/13	PRES2 Groups formed; <b><u>Spotlight Workshops</u></b>	<b>PRES2</b>	
<b>Sunday 11/17, 5pm: Recommended Peer Tutor Consultations this week</b>				<b>HW7 Due</b>
<b>8</b>	11/18	Experimental Data Analysis Making Figures and Tables	<b>HW8</b>	
	11/20	In-class workshop: Discussion		
<b>Sunday 11/24, 5pm: Recommended Peer Tutor Consultations this week</b>				<b>HW8 Due</b>
<b>9</b>	11/25	Peer Review Assignments, In-Class Peer Review	<b>HW9</b>	
	11/27	Workshop for PRES2, <b><u>Spotlight Workshops</u></b>		
<b>Sunday 12/01, 5pm: Recommended Peer Tutor Consultations this week</b>				<b>HW9 Due</b>
<b>10</b>	12/02	Writing Workshop & Peer Review		
	12/04	PRES2: Presentations & Peer Review		<b>PRES2 Due</b>
<b>12/09: Submit <i>Paper 2</i> on Canvas: <i>DON'T BE LATE!!</i></b>				<b>*P2 Due*</b>

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