Syllabus for Psychology 207-010 and 011: Research Methods

Fall 2019 :: University of Delaware

Professor: Beth Morling, Ph.D. Email: morling@udel.edu

Office: Wolf 224 Class meets MWF9:05-9:55 or MWF10:10-11:00

Grad TAs: Anton Lebed (<u>alebed@psych.udel.edu</u>) & Grace Handley (ghandley@psych.udel.edu)

Office hours: Please check Canvas home page

Course Overview

Research Methods is a critical thinking skills class. The main goal is to build your skills as consumer of research. You will learn how to systematically evaluate the validity of different claims that you might encounter in a future psychology textbook, in a psychology research article, or in the media.



All assignments and in-class exercises are designed to help you achieve the **following learning objectives.** If you engage fully in class activities, by the end of the semester you should be able to:

- Identify research claims in both popular and scientific sources and classify them as frequency, association, or causal claims.
- Separate the claim from the study: Does the data support the claim?
- Use a framework of "Four Big Validities" (construct, internal, external, and statistical) to ask systematic questions about the evidence behind different claims.
- Evaluate the extent to which researchers have measured their variables reliably and with validity.
- Discriminate between experimental, quasi-experimental, and correlational studies.
- Explain why correlational studies cannot support causal claims (and when they come close).
- Explain when and why an experiment can support a causal claim.
- Identify and interpret factorial experiments.
- Explain when we can generalize from a study, and explain when generalization is not a priority.
- Describe the ethical guidelines that apply to research in psychology.
- Use two important tools important to the discipline of psychology: the PsycINFO literature search engine and APA style for writing and citing research papers.

Required Materials

Morling, B. (2018). *Research methods in psychology: Evaluating a world of information (3rd Edition)*. New York: W.W. Norton.

You also need an iClicker.

I donate my royalties from local sales of the book to the UD Department of Psychological and Brain Sciences, a fund that helps support student research.





I will post this syllabus, lecture slides, homework, and all the assignment details on Canvas (www.udel.edu/canvas). You can also work through Inquizitive self-guided learning activities that come with the book.



This is an active learning class in which we will be doing examples, exercises, and problems in small groups almost every day. You will be assigned to at least one study team of 4-5 students. Your group will sit together during class so that you can work together on in-class activities.

Assessments



Reading Quizzes

For the most part, I will not be lecturing in class on material that is also in the textbook. Instead, you will read and study the textbook ahead of time and take short **reading quizzes** on the material in class. Quizzes may not be made up for any reason, including adding the class late, being at a sports event, and so on. However, there are 14 quizzes in the class, and I will drop the lowest 3 grades.



Homework

Homework is designed to make you strong! I will assign **homework** once or twice per chapter. You'll test yourself on basic skills, work at a higher level, and apply what you have learned. For some HW assignments (**self-graded**), you will be grading your own work in class according to a posted key. For these HWs you will receive an actual grade based on accuracy. For other HW assignments, consulting the posted key will be optional for you (**completion-only**). For these HWs you will receive a grade based on completion, in which you get 0 points for HW that is missing, 3 points for HW that is completed very thoroughly, and 1-2 points for HW that is completed less thoroughly. Each HW is worth less than 0.5% of your grade. Don't sweat it if you miss a HW or two.



Writing Assignments

You will be required to complete two **developmental assignments** and complete a **final project** that spans several weeks. Extensive details will be posted on Canvas.



Exams

There will be **four exams**. Each exam asks 20ish multiple-choice questions as well as and one or two multistage, applied problem-solving questions similar to homework problems. The final is cumulative and held during finals week. The top two of the first three exams count for your grade (I drop your lowest score). You can't drop the final exam.



Distribution of Requirements

Best two of Exams 1-3 20% each (= 40%)

Final Exam 25% Quizzes and homework 10%

Developmental assignments 5% each (= 10%)

Final project assignment 15%



Grading Cutoffs

[If you track your grade, please know that Canvas ignores missing work, whereas I count missing work as zero. Ask me for an update.]

Α	93.0-100%	C+	78.0-79.99%
A-	90.0-92.99%	С	73.0-77.99%
B+	88.0-89.99%	C-	70.0-72.99% (Note: You need a C- for the major)
В	83.0-87.99%	D	60.0-69.99
B-	80.0-82.99%		

Policies and Procedures

Late Work, Missed Work, Extensions



- Homework and quizzes are only a small part of your grade—strive for regular completion but don't sweat a few fumbles.
- Homework must be turned in on paper, on time, in class, or not at all. I do not accept homework late. I only
 accept early homework from people with excused absences (such as athletic or religious events).
- Missed guizzes may not be made up (however, I drop the lowest three guiz scores).
- Writing assignments (Developmental assignments and the Final Project steps) should be turned in by the deadlines on Canvas. However, you are granted 3 "sh*t happens" days for writing deadlines—you can apply these to the written assignments in case something comes up (split the 3 days as you need). After you've used all 3 days, late penalties apply (about 10% per day).

Physical Attendance and Mental Attendance (i.e., Use of Devices)



- I presume that you take responsibility for your own learning, so I don't require or take attendance. However, if you choose not to come to class, you will not learn as much. Class time is precious, so in your groups, keep your conversations on topic. Do your homework earnestly and completely (you'll benefit more from it!).
- Using a device in class is like being mentally absent. According to most studies, cell phones and laptops distract you and others around you, interfering with your ability to learn. Students who use devices in class have lower scores on subsequent exams, as do students sitting near them (e.g., Glass & Kang, 2018). For this reason, I do not allow you to use these devices in class.

Academic Honesty

Here are my expectations:





- All homework assignments must be your own work; you may not share homework files among group members or turn in others' work as your own. (You *may* change your answers after your HW is self-graded.)
- If I discover that you have copied all or part of an exam or written assignment from another source (including another student, a web page, a textbook, or other published source), you will be reported to the Office of Student Conduct for disciplinary action (I usually recommend an X grade in the course).
- All writing assignments are to be your own work. If, in your writing, you fail to appropriately paraphrase and cite the ideas of others (specifically, if you use an author's elegant phrase or sentence of more than two words and cite the author, but you fail to put direct quotes around the phrase or sentence you copied), I will ask you to redo the assignment, the assignment will be lowered by two full letter grades, and I may report it to the Office of Student Conduct. To avoid plagiarizing, you must educate yourself about appropriate citation procedures and follow them carefully. When in doubt, ask.

ADA Note



I want all students to succeed in my class. Students who have documented physical or sensory disabilities may need accommodations. Therefore, if you have a disability, please make sure I have your email notice. It will be your responsibility to set up your own extended time exam appointments in the ADA offices (831-4643).

Other Resources

There are many people on campus dedicated to helping students just like you!

- Contact the Center for Academic Success (ae.udel.edu) for academic help.
- Contact the Counseling Center for emotional, social, or career assistance (https://sites.udel.edu/counseling/).

Schedule of Topics and Assignments (subject to minor changes)

Date	Textbook Chapter /Class topic	Assignment		
8/28 W	Introduction			
The Big Picture				
8/30 F	Chapter 1: Theory-data cycle	Chapter 1 quiz		
9/4 W	Chapter 2: Scientific Reasoning	Chapter 2 quiz		
9/6 F	Chapter 2: Finding literature			
9/9 M	Chapter 3: Three claims	Chapter 3 quiz		
9/11 W	Chapter 3: Four validities			
9/13 F	Chapter 3: Integration			
9/16 M	Chapter 5: Reliability of measurement			
9/18 W	Chapter 5: Reliability of measurement			
9/20 F	Chapter 5: Validity of measuremen	·		
9/23 M	Chapter 5: Validity of measuremen			
9/25 W	Exam 1	Chapters 1, 2, 3, 5		
Frequency Claims, Association Claims				
9/27 F	Chapter 6 & 7: Surveys and Sampli			
9/30 M	Chapter 8: Bivariate correlations	Chapter 8 quiz		
10/2 W	Chapter 8: Correlation and causati	on		
10/4 F	Chapter 8			
10/7 M	Chapter 9: Regression	Chapter 9 quiz		
10/9 W	Chapter 9			
10/11 F	I	De els escelet Automoral 2 de		
10/14 M	Chapter 9	Developmental Assignment 2 due		
10/16 W	Chapter 9: Longitudinal designs Exam 2	Charters C 7 9 0		
10/18 F		Chapters 6, 7, 8, 9		
Causal Claims 10/21 M Chapter 10: Simple experiments Chapter 10 quiz (note: 10/22 is the late				
10/21 101	Chapter 10. Simple experiments	add/drop deadline)		
10/23 W	Chapter 10 (introduce final project)			
10/25 F	Chapter 10	1 3		
10/28 M	Chapter 11: Validity threats	Chapter 11 quiz		
10/30 W	Chapter 11	· · ·		
11/1 F	Chapter 11: Null results	Project Step 1 due		
11/4 M	Chapter 12: Complex experiments	Chapter 12 quiz		
11/6 W	Chapter 12			
11/8 F	Chapter 12			
11/11 M	Chapter 12	Project Step 2 due		
11/13 W	Exam 3	Chapters 10, 11, 12		
	Balancing	Research Priorities		
11/15 F	Chapter 13: Quasi Experiments	Chapter 13 Quiz		
11/18 M	Chapter 13			
11/20 W	Chapter 14	Chapter 14 Quiz		
11/22 F	Chapter 4	Chapter 4 Quiz Project Step 3 due		
11/25-29: 😘 Thanksgiving Holiday Break				
12/2 M Review and consolidation				
12/4 W	Review and consolidation			
Finals week (ti	me TBA)	Final exam on all chapters		

Study Better

Do you need to upgrade your studying game? In this class, you should read and take notes on the book, but don't waste your time *re*reading or pseudostudying. Instead, try the six research-based strategies described on this poster. See more detail here: https://tinyurl.com/yautpxwd.

