

PSYCH 209: Fundamentals of Psychological Research

Spring 2018, University of Washington

Psychology majors must learn the content of psychology, but they also must learn how psychologists know what they know. Fundamentals of Psychological Research is a critical thinking skills class in which the main goal is to help you become a better consumer of information—both in psychology and in the real world. 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, in the media, or in casual conversation. This class will also teach you how to plan psychological research that can test different claims. You will learn to articulate the pros and cons of different research choices and plan research that optimizes these pros and cons.

All course resources can be accessed via [MODULES](#).

TEACHING TEAM

Professor: Dr. Tabitha Kirkland (*tabithak*)

TA Fellow: Saethra Fritscher (*sfrits*)

Teaching Assistants: Terrénce Pope (*tjpoppe*) Sean Jarvis (*sjarvis2*)
Carly Loyer (*cloyer*) Max Halvorson (*maximum2*)

Peer Tutors: Jiayang He (*jiayang*), Lychee Tran (*mailant*), Sunny Zhu (*sunnyz*)

Email Policy:

- For all course content questions, please post your question on the weekly discussion board. (There is a separate discussion board for [general course policy questions](#).)
- For questions about InQuizitive, contact Lychee.
- For questions about Poll Everywhere, contact Sunny.
- For questions about discussion section, assignments, or your grades, contact your TA (*NetID@uw.edu*, above).
- For other questions or concerns, contact *both* Dr. Kirkland and the TA fellow.
- To discuss a question or topic in greater depth, plan to visit office hours. You can attend office hours for *any* TA, not just the one leading your section.
- There's also an ongoing, student-led discussion board called [The Coffee Shop](#) for you to discuss ideas or plan study sessions with your classmates.

MATERIALS

- **Textbook:** *Research Methods in Psychology* (3rd edition) by Beth Morling. Either the print version or the ebook is fine. ([Purchase ebook here.](#))
- **InQuizitive:** quizzing software that comes with the textbook; available for \$25 if purchasing separately. ([Purchase InQuizitive here.](#)) More information is in the InQuizitive section under *Course Requirements*.
- **Poll Everywhere:** free lecture participation software that uses your mobile device. ([Sign in with your UW email here.](#)) More information is in the Poll Everywhere section under *Course Requirements*.

MEETINGS

Lectures: Mon/Wed/Fri 10:30-11:20 Kane 110

Discussion sections: Tue/Thu as follows:

Section	Time	Room (Tue)	Room (Thu)	TA
AA	8:30-9:20	MGH 287	SAV 156	Terréce
AB	9:30-10:20	MGH 074	SAV 158	Terréce
AC	10:30-11:20	SAV 158	SAV 158	Carly
AD	11:30-12:20	SAV 137	SAV 137	Carly
AE	12:30-1:20	SAV 137	RAI 116	Sean
AF	1:30-2:20	SAV 162	SAV 162	Sean
AG	2:30-3:20	SAV 155	SMI 404	Max
AH	3:30-4:20	SAV 137	SMI 404	Max

CLUE study session: Mon 6:30-8 in MGH 228 with peer tutors (starting Week 2).

- *Exception:* sessions that would have been held the same day as an exam are rescheduled to the Thursday before exams (4/19, 5/31) in MGH 231.

Office hours:

Day	Time	Who	Where

Monday	12-1	Terréce	Chem Library 36
Monday	2:30-3:20	Dr. Kirkland	Guthrie 133
Tuesday	1-2	Carly	Chem Library 36
Wednesday	2:30-3:30	Dr. Kirkland	Guthrie 133
Thursday	3-4	Sean	Chem Library 36
Friday	11:30-12:20	Max	Chem Library 36
Friday	1-2	Saethra	Chem Library 36

LEARNING GOALS

We believe it is important that you learn useful and practical research skills in this class. Above all, our priority is to help you become a good consumer of information and to be able to tell the difference between claims you can trust and claims you cannot trust. Your progress on each of the specific learning goals listed below will be assessed in some way through your coursework in this class. Feel free to check in with us if you are struggling with any of these goals, and know that a struggle means that you are being challenged, which is where real learning occurs.

Learning Goal	Assessment
1. Apply to real-world examples the different approaches psychological scientists take to conduct research, including the types of design that are most appropriate to address different questions.	Exams, participation (lecture & section)
2. Analyze examples of research in terms of major research principles and concepts.	Exams, participation (lecture & section)

<p>3. Evaluate the strengths and weaknesses of claims found in the popular media.</p>	<p>Exams, participation (lecture & section), research project 1</p>
<p>4. Find, read, and discuss psychological research literature by demonstrating: (a) the ability to search for reputable sources of information, and (b) the ability to read and understand an empirical article.</p>	<p>Participation (section)</p>
<p>5. Conduct original research by applying knowledge of literature search skills, reading and summarizing prior work, hypothesis generation, research methodology, and conceptual statistics.</p>	<p>Research projects</p>
<p>6. Improve written and verbal communication skills in the context of discussing, analyzing, and applying methodological concepts.</p>	<p>Participation (lecture & section) and research projects</p>

We are also interested in your goals for the course. We will discuss your personal goals during Week 1 and reflect back on how well the course met those goals during Week 10.

EXPECTATIONS

Our Role as Instructors

We are here to guide you in exploring this challenging and interesting material. We will do our best to make class time interesting, engaging, and enjoyable for everyone. We will use on a variety of methods to promote learning, including videos, discussions, and activities. We will create and enforce a learning atmosphere that is safe, comfortable, and respectful for everyone. We will communicate our expectations clearly and hold all learners to equitable standards. We will welcome questions, comments, and suggestions, and we will adapt to individual needs whenever possible. We may modify this syllabus as needed to accommodate your learning.

Your Role as Learner

Students learn best when they are actively engaged and involved in the learning process. This is an active and interactive course in which you will often learn by discussing and/or doing. You are expected to observe the world, read, write, discuss, and participate. Our classroom is

a *collaborative learning community* wherein all students can teach and learn from each other. Every time you make a comment or ask a question, you teach something to the rest of us. We challenge you to abandon the traditional passive student role and to get involved with teaching and learning.

COURSE REQUIREMENTS

1. Chapter Quizzes [50 points]

You are responsible for completing the assigned reading before class. To help you stay accountable, you will be required to take an online pre-lecture reading quiz *before class time* each day we start a new chapter (see schedule). These quizzes use InQuizitive, an adaptive learning game in which you gain and lose points based on correctness and how confident you are in your answer to each question. Each quiz is worth 5 points and should take roughly 30 minutes to complete, assuming you have done the reading.

All InQuizitive quizzes have three levels: Level 1 has an equal distribution of questions from all learning objectives; Level 2 will give you questions based on how well you're doing (harder questions if you're doing well, easier questions if you're not); and Level 3 will give you personalized questions based on the learning objectives you had the most trouble with in Levels 1 and 2. You have the opportunity to earn full credit on every quiz by continuing to play until you reach the target score, or you can stop once you've answered the minimum number of questions and get partial credit.

Late quizzes will be accepted with a 2 point penalty per day. Please contact Lychee if you submit your quiz late so she can manually adjust your score.

Note: The last quiz of the quarter will be given in class using Poll Everywhere rather than on InQuizitive.

INQUIZITIVE TROUBLESHOOTING

You can access all quizzes through the links in Canvas. **We recommend going through the “How to Use InQuizitive” practice quiz first so you understand the scoring and confidence ratings. In particular, please note that you must reach the target score *and* answer the minimum number of questions to receive credit.**

InQuizitive scores are stored on a separate website. You will need to click the InQuizitive links in Canvas to sync your scores between InQuizitive and Canvas. If your score is ever blank on Canvas, it means it has not been synced with InQuizitive.

[If your copy of the textbook did not come with InQuizitive, you can purchase access for \\$25 here.](#)

2. Exams [100 points]

Two exams will consist of a combination of multiple-choice and short-answer questions covering information from the text, lecture, and discussion sections. Questions will be similar to those from participation activities. Exams may require you to make basic statistical calculations, graph data, and interpret data. Study guides will be provided to assist you in preparing for these exams. The midterm exam is worth 40 points and the final exam is worth 60 points. The final exam will be cumulative to the extent that the material in each part of the course builds on information covered in previously.

The midterm exam may be taken early with at least one week's notice and a documented reason for doing so. The final exam may not be taken early. Late exams are permitted in rare circumstances with documentation and at instructor's discretion only.

Note: if you believe an error has been made in the grading of short-answer questions, see the "Regrade Requests" section under Course Policies below.

3. Section Participation [40 points]

On section meeting days, you will be doing examples, exercises, and problems in small groups. Each section is designed to help you either complete major projects or learn what you need to progress in the class. If you miss sections, you will not be able to participate in these activities and will have difficulty keeping up with class material.

During sections, you will work on activities in groups of 3-4 students. Please bring a laptop to section each day. If you do not own a laptop, you can borrow one through the [Student Technology Loan Program](#).

Section participation is graded on a combination of attendance and submission of group activity work. No late activity work is accepted. By attending and participating, you will earn 2.5 points per day, or 5 points per week, for a total of 50 points possible. Because this category is worth only 40 points, this gives you the option to earn up to 10 extra points for perfect attendance/participation. This also gives you some flexibility in case you must occasionally miss class.

4. Research Projects [60 points]

You will participate in three short research projects, most of which will be completed during section time. These projects will receive grades separate from the section participation / activity grades. More information about each of these projects, including a detailed instruction sheet and grading rubric, will be available separately from this syllabus. Projects include:

1. **Folk Psychology: "To Share or Not to Share"** (20 pts): a project in which you will identify a popular psychological idea and conduct some research in the psychological literature to find out whether or not the idea is supported by evidence. You will present in section about your findings.
2. **Social Experiment** (20 pts): a project in which you will identify a research question about human behavior, figure out how to measure it, collect data by observing others behavior, then report on the findings.
3. **Survey Development** (20 pts): a project in which you will develop survey questions about human behavior, collect data by distributing your survey to others, then report on the findings.

Notice: *The University has a license agreement with VeriCite, an educational tool that helps prevent or identify plagiarism from Internet resources. Your instructor may use the service in this class by requiring that assignments are submitted electronically to be checked by VeriCite. The VeriCite Report will indicate the amount of original text in your work and whether all material that you quoted, paraphrased, summarized, or used from another source is appropriately referenced.*

5. Lecture Participation [50 points]

On lecture days, in-class discussion and activities will be facilitated through Poll Everywhere (PollEv), free classroom response software which collects responses sent electronically and shows them in real time. Your PollEv account has already been created using your UW email address. You will be graded on your rate of participation each week, defined as the number of items you responded to divided by the total number of items presented. Points will be awarded according to the scale below. You will receive a separate participation score for each week of class, which will be updated on Canvas. (5 pts x 10 weeks = 50 pts)

Excused absences policy:

Student-athletes and people with serious illnesses or other documented reasons for missing class are eligible for excused absences from lecture. People with an excused absence may make up their missed class(es) as follows:

1. Email your TA with the date(s) you plan to miss ahead of time and documentation for your absence.
2. At the end of the week, consult the summary PDF posted in the PollEv assignment for the week.
3. For every poll you missed, write what your response would have been *and explain why* you would have responded that way. For multiple-choice responses, this means including evidence for your choice. For open-ended/short-answer responses, this means writing a substantive amount (a few sentences) rather than a word or phrase.

4. Email your TA with (a) the number of polls you missed that week, (b) the question text and your responses to those polls, and (c) what your participation score should be, according to the number of polls listed in the PDF and the table below.
 - Example: Rachel has a documented, approved, excused absence for Monday. She attends on Wednesday and she is absent (not excused) on Friday. She checks the PDF and sees that there were 10 polls that week: 3 on Monday (her excused-absence day), 3 on Wednesday that she responded to while she was in class, and 4 on Friday (her not-excused day). She emails her TA with her responses to the 3 excused-absence polls and calculates that she should receive credit for 6/10 polls, which translates to a 3/5 according to the table below.

Participation Rate	Weekly Points
80%+	5
70-79%	4
60-69%	3
50-59%	2
40-49%	1
0-39%	0

INSTRUCTIONS FOR USING POLLEV

1. **Login and manage your account:** visit polleverywhere.com and type in your UW email. After entering your email, you will see a small prompt to login via Single Sign-On. Enter your usual UW NetID and password.
 - *Note: you must use your UW email address to participate in polls. You cannot receive credit for participating with a personal email address. Polls will only accept responses from registered users.*
2. **Participate in polls:** go to pollev.com/uwpsych on your mobile device. You can also text your responses using information provided in class; however, you will need to add your phone number to your account (on polleverywhere.com) in order for the system to track those responses and match them to your account.

POLLEV TROUBLESHOOTING

If you ever have questions about your PolleEv score for a given week, please follow these steps:

1. Count the number of polls in your response history for that week (available at pollev.com/uwpsych in the upper right corner).
2. Check this number against the polls listed in the pdf posted in the weekly PolleEv assignment to calculate your response rate (e.g., if you completed 8 of 10 polls, your response rate would be 80%).
3. Compare your response rate to the grading table in the syllabus.
4. If there are any discrepancies between your calculation and the points received (e.g. if your calculated response rate is 80% (5/5) but you receive 3/5) please contact Sunny. Include the number of polls in your response history, the total number of polls, your response rate, and the score you should have received according to the table.

Having trouble connecting to PolleEv during class? [Report the issue here.](#)

GRADES

Grading Category	Points
Quizzes	50
Exams	100
Section Participation	40
Research Projects	60
Lecture Participation	50
Total Points	300

The UW uses a [numerical grading system](#). The following scale will be used to assign final grades in the course. Please be aware that 0.7 is the lowest passing grade used at the UW. Any grade below that is a 0.0. *Note: it is your responsibility to earn the grade you want, starting the first day. We do not give extra credit opportunities to make up for poor performance.*

Percentage (%)	Grade Points	Letter Grade Equivalent		Percentage (%)	Grade Points	Letter Grade Equivalent
94-100	4.0	A		76	2.2	C+
93	3.9	A		75	2.1	C
92	3.8	A-		74	2.0	C
91	3.7	A-		73	1.9	C
90	3.6	A-		72	1.8	C-
89	3.5	A-		71	1.7	C-
88	3.4	B+		70	1.6	C-
87	3.3	B+		69	1.5	C-
86	3.2	B+		68	1.4	D+
85	3.1	B		67	1.3	D+
84	3.0	B		66	1.2	D+
83	2.9	B		65	1.1	D
82	2.8	B-		64	1.0	D
81	2.7	B-		63	0.9	D
80	2.6	B-		62	0.8	D-

79	2.5	B-		60-61	0.7	D-
78	2.4	C+		0-59	0.0	F
77	2.3	C+				

Incompletes

Only students with special circumstances beyond their control who have obtained permission from Dr. Kirkland are eligible for a grade of Incomplete. Incompletes will not be given out at the end of the quarter to escape a poor grade.

COURSE POLICIES

Canvas: The Course Website (<http://canvas.uw.edu>)

Canvas will be used for downloading materials, submitting assignments, etc. Plan to check it regularly. Our course home page can be accessed on the main dashboard or from the *Courses* menu on the left menu.

Panopto: Lecture Recordings

Our lectures are recorded by Panopto Recordings and posted on Canvas. Feel free to use these as a resource. (Note: it is important to attend this class. As an incentive to attend class, lectures will *not* be live-streamed.)

Email Communication

Wondering who to contact? See the "Email Policy" section at the top of this syllabus.

Please use standard professional guidelines for all emails, including using a formal greeting, writing in complete sentences, and signing your name. Please include PSYCH 209 in your subject heading along with a specific phrase related to your question or comment. We will respond to all messages within 24 hours on weekdays. Weekend responses may take longer; please plan accordingly. Here is a general template that will go over well with us or any instructor (full details at <http://bit.ly/2ceflXU>):

To: TA@uw.edu

Subject: PSYCH 209: Question about Chapter 3

Dear (Name of TA),

This is a polite line that recognizes our common humanity (e.g., I hope you are enjoying the weather / had a great weekend / etc.).

I'm _____. (Any identifying details you include will be helpful in helping us figure out who you are.) *This is the question I have or the help I need. I've looked in the syllabus and at my notes from class and online and I asked someone else from the class, and I think This Is The Answer, but I'm still not sure.* (This shows you did your homework before contacting us, which gains you instant respect.) *This is the action I would like you to take.*

Thank you,
Favorite Student

Regrade Requests

- You must think the TA who graded your written work made an error in grading based on the rubric. Regrades cannot be requested just because you are unhappy that you did not perform well.
- Grading errors must add up to more than 1 point.
- You must submit a written explanation of each grading error to your TA who graded the original work. The written explanation must explicitly reference the grading rubric.
- The regrade request and written explanation must be submitted a maximum of one week after receiving your graded assignment. Requests made after this date will not be considered.
- Your TA will consider your request and let you know of the outcome. If you are dissatisfied with the result of this process, you may contact Dr. Kirkland, who will arbitrate any remaining disputes.

Guidelines for Discussion

- When the class is engaged in lecture and whole-class discussion, please raise your hand to ask questions or otherwise contribute. Side comments and conversations are distracting. If you feel tempted to whisper comments to a classmate, either participate in the whole-class discussion instead or write your comments to share privately.
- If you contribute frequently, I may call on other people instead to get a variety of perspectives.
- In an academic setting, everyone has the right to express different views in a respectful atmosphere. Please be considerate of your classmates.

Technology in the Classroom

- Mobile phones should be *silenced* and put away before class. Unless we are actively engaged in a participation activity, **do not use your phone during class**. Limit the temptation to check your phone by keeping it in your bag.
- For your own sake, I strongly suggest that you *do not* use your laptop during class. Scientific research has shown that **typing notes in class causes worse learning of the material compared to writing** – and not just because of their potential for distraction. If you must use your laptop, please do not do anything to detract from others' learning.

- If you are learning English, you are welcome to use an electronic dictionary during class. Please note that you may only use a paper dictionary during exams and that you must sit in the first two rows to do so.

Punctuality

- Please be on time for class. Arriving late or leaving early breaks the flow of the class and can be a cause for distraction. If you *must* occasionally arrive late or leave early, please take a seat near the door.
- Please wait until class ends to pack your things. We will always end class on time. Packing early invariably causes a “domino effect,” which is distracting to everyone and may result in your missing important information.

Attendance

- If you miss any class session, consult the schedule to see what topics were covered. You are responsible for obtaining notes and information on any in-class announcements from peers. Do not contact us to ask what you missed. If you have questions concerning the missed class that you are unable to answer yourself after reviewing a classmate’s notes, please see one of us during office hours for clarification.

A Note on Multitasking

Research shows that when we do more than one thing at a time, we’re not actually doing them simultaneously. Instead, we’re shifting our attention from one thing to another. During that shift, we lose focus, and it takes effort to refocus on the new task. In fact, some research shows that the more often we “multitask,” the more distracted we are by irrelevant information, and the worse we are at concentrating. *Limit the temptation to multitask* in class, and you’ll do better.

RESOURCES FOR SUCCESS

Office Hours

These hours (listed at the top of the syllabus) are a specific time your instructor and TAs set aside specifically to talk with students. We are *always* available during office hours – no appointment needed. Just stop by! Come to office hours with questions, comments, or topics for debate. We are also happy to talk about other [psychology](#)-related topics, such as getting involved in research or applying to graduate school. Please correspond with us via email or on [Canvas](#) if those times don’t fit your schedule.

Textbook Study Tools

- Each chapter ends with a short quiz and several “Learning Actively” exercises. Quiz yourself on the material and complete any “Learning Actively” exercises we don’t do together in class for additional practice.
- There are several resources on the publisher’s website, [StudySpace](#), and on the author’s blog, [Everyday Research Methods](#).

Get Extra Help Studying

There are many resources on campus to help you improve your study skills, time management, reading speed, and content knowledge. For example, check out the Instructional Center for drop-in tutoring and workshops for several courses in psychology. More info: <https://www.washington.edu/uaa/advising/finding-help/study-centers-and-tutoring/>.

Stay Healthy

The UW offers a wide [array of services](#) for staying physically and mentally healthy, from rec sports to meditation to counseling, crisis intervention, and support groups. Some specific resources include:

- [Student Health & Wellness](#): UW department dedicated to supporting students through challenges that might otherwise compromise education.
- [D Center](#): The D Center strives to create an inclusive, accessible space affirming of all bodies, minds and identities by fostering a culture of social justice and pride.
- [Q Center](#): UW's gender and sexuality support & celebration center.
- UW counseling center: 401 Schmitz Hall, 206-543-1240
- Hall Health mental health center: 206-543-5030 (appointments); 206-583-1551 (emergencies)
- Crisis lines (for immediate help):
 - UW Medical Center ER: 206-598-4000
 - King County Crisis Line: 206-461-3222

Access and Accommodations

Your experience in this class is important to us. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to us at your earliest convenience so we can discuss your needs in this course.

If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but are not limited to: mental health, attention-related, learning, vision, hearing, physical or health impacts), you are welcome to contact DRS at 206-543-8924, uwdrs@uw.edu, or disability.uw.edu. DRS offers resources and coordinates reasonable accommodations for students with disabilities and/or temporary health conditions. Reasonable accommodations are established through an interactive process between you, your instructor(s) and DRS. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law.

COURSE SCHEDULE

We may modify this schedule as needed to accommodate your learning. Any changes will be announced.

Week	Dates	Monday (lecture)	Tuesday (section)	Wednesday (lecture)	Thursday (section)	Friday (lecture)
1	3/26-3/30	Psychology is a Way of Thinking (1)	Introductions and Goals	Quiz: Ch 1 & 2 Sources of Information (2)	Project 1: Folk Psych (Pt 1 of 3): <i>Identifying Claims</i>	Sources of Information (2)
2	4/2-4/6	Quiz: Ch 3 Three Claims, Four Validities (3)	Project 1: Folk Psych (Pt 2 of 3): <i>Finding Research Articles</i>	Three Claims, Four Validities (3)	Project 1: Folk Psych (Pt 3 of 3): <i>Presentations</i> (Project 1 due)	Three Claims, Four Validities (3)
3	4/9-4/13	Quiz: Ch 5 Measurement (5)	Finalize study groups Measurement activity	Measurement (5)	Project 2: Social Experiment (Pt 1 of 3): <i>Designing a Study</i>	Measurement (5)
4	4/16-4/20	Quiz: Ch 6 & 7 Surveys & Observations (6)	Project 2: Social Experiment (Pt 2 of 3): <i>Conducting a Study</i>	Surveys & Observations (6)	Project 2: Social Experiment (Pt 3 of 3): <i>Study Results</i>	Sampling (7)
5	4/23-4/27	Midterm Exam	Project 3: Survey (Pt 1 of 3): <i>Survey Development</i>	Quiz: Ch 8 Bivariate Correlations (8) Project 2 due Wednesday 4/25 8pm	Project 3: Survey (Pt 2 of 3): <i>Survey Development</i>	Bivariate Correlations (8)

6	4/30-5/4	Quiz: Ch 9 Multivariate Correlations (9)	Reading and writing research articles	Multivariate Correlations (9)	Project 3: Survey (Pt 3 of 3): <i>Survey Results and Lab Report</i>	Multivariate Correlations (9)
7	5/7-5/11	Multivariate Correlations (9)	Multivariate correlations activity	Quiz: Ch 10 Simple Experiments (10)	Simple experiments activity	Simple Experiments (10)
8	5/14-5/18	Quiz: Ch 12 Multivariate Experiments (12) Project 3 due SUNDAY 5/13 8pm	Multivariate experiments activity	Multivariate Experiments (12)	Multivariate experiments activity	Multivariate Experiments (12)
9	5/21-5/25	Multivariate Experiments (12)	Quiz: Ch 4 Technology & ethics discussion	Ethics (4)	IRB role-play activity	Ethics (4)
10	5/28-6/1	Memorial Day: NO CLASS	Replication crisis discussion Required reading: "The Replication Crisis in Psychology"	Quiz: Comprehensive Final Exam review	Final Exam review	Final Exam review
11	6/4	Final Exam: 8:30-10:20				

