

PSY 10A: Research Methods

Summer Session A, 2022 (June 21 to July 30)

Instructor: Delancey Wu

Email [REDACTED]

Lectures: [REDACTED] Mon., Tues., Wed. from 11am to 12:25pm

Office Hours: Thurs. 10:30am-12:30pm at [REDACTED] AND Psychology courtyard

TAs, Lab, and Office Hours Info

TA Name	Area of Study	Email	Lab Location, Day, and Time	Office Hours
[REDACTED]	Social	[REDACTED]	[REDACTED] Wed., 12:30-3:25pm	Wed. & Thurs. from 9:30-10:30am Zoom: [REDACTED]
[REDACTED]	Social	[REDACTED]	[REDACTED] Wed., 2:00-4:55pm	Zoom: [REDACTED]
[REDACTED]	Evolutionary	[REDACTED]	[REDACTED] Thurs., 12:30 to 3:25pm	Fri. from 11am-1pm Zoom: [REDACTED]
[REDACTED]	Evolutionary	[REDACTED]	[REDACTED] Thurs., 2:00-4:55pm	Wed. from 1-3pm [REDACTED]

Table of Contents (Click each link to navigate the syllabus)

Instructor, TA, Lecture, Lab, and Office Hours Info	1
Welcome Message	2
Course Overview (Learning Objectives, PLOs).....	2-3
Course Structure (Lectures, Labs, Textbooks and Readings, Office Hours).....	3-4
Course Requirements (Research Participation, Course Participation, Outlining Assignments, Quizzes, Research Proposal).....	4-6
Grading	6-7
Course Schedule (General, Week-by-Week).....	7-9
Departmental and University Policies	9-10
Student Well-Being Resources	10

Welcome Message

Welcome to PSY 10A! I am excited to teach you how to design studies for psychological research and see where you will take your knowledge of research methods when you write your proposal for this course. I value a diverse set of viewpoints, and I welcome the strengths and talents each of you possess as part of our PBS community.

Educational psychology theories and research provide support that learning in a social context and from each other is an integral part of the learning process. As we continue in-person participation, these in-person meeting times are valuable in facilitating your ability to understand and apply the concepts not only theoretically but also practically in your daily life. This also means following any university guidelines regarding masking when they are set in place. As the situation regarding COVID changes, and since we can still get the cold and the flu, if you aren't feeling well, please don't attend lecture or your lab session, but please do let your TA and me know so we can make a plan. There is flexibility built into the course, such as most assignments will have the lowest one be dropped, to account for the randomness of life. Otherwise, if you are feeling well, please make it a priority to attend in-person lectures and labs because the scheduled in-person work is set up to aid in your learning. We will also adapt the course as needed regarding COVID, so I will try to keep this syllabus up to date and update it as needed.

You belong in Psychological and Brain Sciences, and you belong here as a researcher. We have complete confidence in your ability to be an active, capable member of PSY 10A. We also have complete confidence in your ability to develop your research and writing skills, and we are committed to guiding you through this process. Please feel free to discuss these things with Delancey and your TAs.

Course Overview

The goal of this course is to introduce you to how to conduct psychological research, study design, and methodology. Specifically, we will cover how to conduct background literature and read primary research articles in psychology to learn about what has already been done, how to design studies to build and extend on past research, make specific hypotheses and predictions of psychological processes, how to measure abstract psychological constructs concretely, and how to critique study designs to be able to detect pros and cons of different methodologies. Each assignment and activity integrated into the course is meant to *scaffold* students' final papers so students can work on their paper bit by bit with each week. This course will also provide an opportunity for peer feedback and evaluating other students' understanding of the material. Students will demonstrate their understanding of these concepts by writing a research proposal on a psychological topic of their choosing.

Learning Objectives:

- **Understand** the components of the scientific method process in psychology (such as searching for background literature, making predictions and hypotheses, creating study designs to test one's hypotheses, strengths and limitations of different study designs)
- **Identify** different research designs (such as correlational vs. experimental) and measurements (such as self-report, behavioral), and the pros and cons of each and when you should use them
- **Find, summarize, and evaluate** empirical research articles from psychological academic, peer-reviewed journals to break down what researchers have studied (and have not studied)
- **Communicate** your own research proposal in APA format that culminates the research methods knowledge and skills you acquired throughout the course.

Program Learning Outcomes: The Department of Psychological & Brain Sciences' Program Learning Outcomes reflect the knowledge, skills, and values that students are expected to acquire upon completion of their BS degrees. In particular, this course promotes acquisition of PLOs #2 (understanding and application of basic empirical research methods including research design and interpretation through lectures, labs, and assignments), #3 (development and demonstration of critical thinking skills by evaluating and critiquing study designs), and #4 (demonstration of competency in written communication via assignments and the final proposal).

Course Structure (Where and when is stuff happening?)

Gauchospace:

The Gauchospace page for this course is where all the necessary materials and assignments will be provided and will be the only place where you can submit your assignments. Please check Gauchospace (and your email) regularly for announcements and updates.

Lectures:

Lectures will be *in-person* in Psych 1924 on Mondays, Tuesdays, and Wednesdays from 11am to 12:25pm (excluding two holidays: Juneteenth and July 4th). *These lectures will not be recorded.* We will be tracking your lecture attendance via a quick "Check-In" form meant to be completed at the end of each lecture, where you will fill out basic questions to check your understanding of the lecture's material (see more info under "Course Participation on p. 6). Slides will be released after the lecture.

Lab Sections:

Dates, times, and locations for lab sections are in the table on the first page of the syllabus and under the "General" tab on Gauchospace. The purpose of lab sections is to apply the knowledge you learned in lectures to individual and group activities and assignments, as well as to complete assignments that can be used for your final research proposal. There will also be Lab Notebooks for

each week, which are handouts with more information about what will be covered in the labs. We highly encourage you to attend all the lab sections and will be keeping track of attendance in lab each week as part of your “Course Participation” grade. If you know ahead of time that you are not able to make it to at least 5 of the discussion sessions, please let Delancey and your TA know so we can make a plan.

Textbook and Readings:

We will use the following required textbook:

Morling, B. (2021). *Research Methods in Psychology: Evaluating a World of Information*(4th Edition). New York, NY: W. W. Norton & Company, Inc.

The 3rd edition is also okay to use, just make sure the chapter matches the lecture topics. Assigned chapters from the Morling book are intended to read *before* the corresponding lectures. This textbook will be online only and physical copies are not guaranteed at the bookstore. If you are able to access the online textbook, you will also have access to quizzes and activities that can supplement your learning.

In addition, some weeks will have one or two articles to read that go with each week’s lab. You will need to read these articles before your lab section for that week, and they will be provided to you on GauchoSpace under the “Article Readings” heading.

Office Hours:

Dates, times, and locations for office hours with the TAs and Delancey are on the first page on the syllabus. Delancey’s office hours will be available both in-person and over Zoom, and feel free to go to office hours for any of the TAs, not just your own. There will also be a public GauchoSpace forum open if you prefer it over email and for questions that would benefit multiple people.

Course Requirements (What do I need to do?)

Research Participation:

You will also be *required* to participate in research happening at UCSB so you can gain first-hand experience with psychological research studies. These studies take place *outside of PSY 10A* To complete this requirement, you may choose between 2 options below:

1. **Participate in experiments:** Actually participate in research being conducted at UCSB! You will be required to complete **3 research participation credits** (3 hours of research). A study that is 30 minutes or less = ½ credit, and studies that are 31 minutes to 1 hour = 1 credit.
2. **Write a research paper:** Read and write about someone else’s research if you prefer to not participate in research instead. To complete this option, you will need to write a **2-page (double-spaced) paper on 1 research article** (different from the articles you will use in your

Research Proposal). This is *separate* from other assignments in this course (including your research proposal, lab activities, and other assignments).

More details about these options are on GauchoSpace and will be covered by Delancey and your TA. If you ***do not complete*** the research participation requirement, ***your grade will be reduced by 1/2 of a letter grade*** (for example, if you have an A but did not complete the research participation requirement, your grade will go down to a A-). There are no exceptions to the research requirement without medical or legal documentation.

Course Participation:

Participation is included as 10% of your grade in order to help you stay engaged with and on top of the material. Participation in the course will be counted in two ways:

1. **Lecture check-ins:** Each lecture will end with a check-in form to check your understanding of the lecture. In order to be counted, you will need to complete this form within 15 minutes of the end of lecture (complete by 12:40pm). You will *not* be graded in terms of whether you were correct; this is for you to see what you remembered and what you need to focus on. In fact, it is helpful for me to see what concepts students are missing (and understanding) so I can re-review them as needed.
2. **Lab attendance:** Your TA will keep track of your attendance for each lab and that you are present. Attendance for **5 out of the 6 labs is mandatory** because of the valuable time that you'll have in lab with your TA and your peers.

Each lecture check-in and each lab attendance is worth 0.5 point each. You can ***miss or drop either 2 lectures OR 1 lecture and 1 lab*** and still get full points for Course Participation. Missing 2 labs will lead to a 0.5 point deduction for Course Participation.

Lab Activities:

Each lab will include a Lab Activity related to the lecture and your research proposal. This Lab Activity has both group and individual work. To get full credit for Lab Activities, you must complete the lab activity for **5 out of the 6 labs**. If you complete all 6, we will drop your lowest Lab Activity. If you know you will not be able to attend a lab, you may complete the **entire** activity (including the group part) to get full points, but you must submit it by **Thursday at 11:59pm** for that week.

Outlining Assignments:

There will be 4 assignments (that will be *different* from your lab activities) that will help guide you in writing your research proposal. These assignments are also intended to prep you with corresponding lab activities, so they must be completed **before your lab** on the corresponding week (so for example, Assignment #1 is assigned on Week 2, so you must submit Assignment #1 before your Week 2 lab). Because they will assist you greatly in your research proposal, ***each assignment is required and none will be dropped.***

Quizzes:

There will be 3 quizzes on Weeks 2, 4, and 6 (posted on July 1, July 15, and July 29) taken online on Gauchospace. You will be able to take the quiz from 7am to 11:59pm that day. Once you start the quiz, you will have 30 minutes to complete it. If you do not complete the quiz by this time limit, your quiz will be automatically submitted with whatever answers you have. The quiz content will cover material from the lectures, labs, textbook chapters, and article readings. Your lowest quiz will be dropped. Quizzes will be open-book and open-note but must be taken *independently*. Any evidence of plagiarism will result in a 0 for your quiz and potential additional consequences. (See p. 8-9) for our “Academic Misconduct Policy” for more information about our plagiarism policy.) Because of the short nature of the course and you can drop the lowest quiz, *retakes will not be provided*.

Research Proposal:

You will write a research proposal that will be from 8 to 10 pages. The activities you will do during lectures and labs will help guide you in putting together your proposal. In your proposal, you will provide context for your research with a psychological theory, model, or theoretical framework, review empirical literature in one area of psychology, present hypotheses, determine an appropriate sample, choose psychological measures and materials, propose an effective research design and procedure, and consider threats to validity of your proposed study. **You do not need to collect new data or propose/conduct statistical analyses for your research proposal.** Details, examples, and guidelines for your proposal will be posted on Gauchospace throughout the course.

Grading

Your grades will be calculated based on the course requirements above:

Course Requirement	% of Course Grade
Research Participation (required)	2%
Course Participation (.5% for each lecture and lab, lowest 2 dropped)	10%
Lab Activities (2% each, lowest dropped)	10%
Outlining Assignments (6% each, all required)	24%
Quizzes (12% each, lowest dropped)	24%
Research Proposal (required)	30%

Late Policy: *Assignments turned in later than the deadlines above will not be accepted.* While we want to be fair if something happens to you, there is flexibility built in the course for you to miss certain assignments. It is also not fair if you ask for an extension, but another student in a similar situation as you does not, so if extensions are given out, they will be given to everyone. That said, if

something extreme happens or an emergency comes up, please let your TA or Delancey know to advise you on future steps.

PBS Grading Policy: All grades are final. Every effort will be made to ensure that your grade is correct. A grade will be changed only if the work was misgraded or your total points were miscalculated. I will not lower grades to allow retakes of the courses.

Grading Scale: Below is the grading scale used in this course. The instructor reserves the right to change the final grading scale based on the distribution of class scores at the end of the summer session (although keep in mind this is unlikely). Grades will be rounded up based on the .50 criteria for two decimal places. For example, if you earned an 89.50, this would round up to a 90.00 and you will earn an A-, but if you earn an 89.45, you will earn a B+ instead.

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

Pass/No Pass Grades: Instructors are required to submit letter grades for all students. If you registered P/NP for the course, the College will change your letter grade to the appropriate Pass (C or above) or No Pass (C- or below). If you have issues regarding this, please contact your advisor.

Course Schedule

General Schedule

Day of the Week	What to Do
Monday, Tuesdays, Wednesdays	<ul style="list-style-type: none"> ● Complete assigned readings ● Attend lectures ● Complete and submit Check-Ins ● Weeks 2-5: Work on main assignment to submit before lab
Wednesdays/Thursdays	<ul style="list-style-type: none"> ● Attend lab ● Complete and submit lab activity by Thursday at 11:59pm
Fridays	<ul style="list-style-type: none"> ● Weeks 2, 4, and 6: Complete quizzes from 7am to 11:59pm

Week-by-Week Schedule

Week	Topics	Major Assignments and Assessments Due
<p>Week 1 (June 20 to 24)</p>	<p>1. Course overview and intro to psychology. the scientific method 2. Measurement and sampling Labs: Lab overview, subareas of psychology, finding/reading primary literature, inferences Reading(s): Morling (2021) Ch. 1, 2 (only p. 23 (beginning) to 45 (stop at Legitimate Journalism vs Disinformation)), 5, 7 Jordan & Zanna (1999) Bar-Heim et al. (2006) <i>No lecture</i> on June 20 (Juneteenth)</p>	<p>None due this week!</p>
<p>Week 2 (June 27 to July 1)</p>	<p>3. Design basics, operationalization 4. Experimental design, reliability, validity 5. Single factor designs: IVs and quasi-IVs Reading(s): Morling (2021) Ch. 3, 10 Labs: Article discussion, hypothesis generation, finding measures and materials, citations</p>	<p>Outlining Assignment #1: Article Summary due before Lab 2</p> <p>Quiz 1 on July 1 (Fri.) from 7am to 11:59pm</p>
<p>Week 3 (July 4 to 8)</p>	<p>6. Data and interpreting results 7. Research proposal overview Labs: Article discussion, rationale, APA style Reading(s): Cohen (2013) <i>No lecture</i> on July 4 (Independence Day)</p>	<p>Outlining Assignment #2: Hypothesis Generation due before Lab 3</p>
<p>Week 4 (July 11 to 15)</p>	<p>8. Single factor designs: ANOVA 9. Multifactor designs: 2 x 2 ANOVA 10. Multifactor designs: Within, mixed ANOVA Labs: Interpreting interactions, threats to validity Reading(s): Morling (2021) Ch. 12</p>	<p>Outlining Assignment #3: Design Worksheet due before Lab 4</p> <p>Quiz 2 on July 15 (Fri.) from 7am to 11:59pm</p>

<p>Week 5 (July 18 to 22)</p>	<p>11. Observational and correlational designs 12. Moderators and mediators 13. Threats to validity Labs: Finalizing design, Proposal writing workshop Reading(s): Morling (2021) Ch. 8, 9 (only p. 259 (Regression Does Not Establish Causation) to 266 (end of Mediators vs Moderators), 11</p>	<p>Outlining Assignment #4: Annotated Bibliography due before Lab 5</p>
<p>Week 6 (July 25 to 29)</p>	<p>14. Ethics in psychology 15. Bringing it all together Labs: Peer review feedback, proposal writing workshop Reading(s): Morling (2021) Ch. 4, 14</p>	<p>Quiz 3 on July 29 (Fri.) from 7am to 11:59pm *Research proposal due July 29 (Fri.) at 11:59pm*</p>

Departmental and University Policies

Academic Misconduct Policy: Psychological & Brain Sciences Instructors who have reasonable evidence of academic misconduct both report misconduct to the UCSB Office of Judicial Affairs and forward such reports to the OJA Conduct Committee. This allows the OJA to conduct an evidentiary hearing that may clear the student or may compellingly establish misconduct. If academic misconduct is established, the OJA, not the Instructor, decides the consequences other than the course grade, which is conferred by the Instructor.

Any work (written or otherwise) submitted to fulfill an academic requirement must represent a student's original work. Any work (written or otherwise) submitted to fulfill one academic requirement may not be submitted to fulfill another requirement, even if the course is being repeated. Any act of academic dishonesty, such as cheating or plagiarism, will subject a person to Department and University disciplinary action. Cheating includes, but is not limited to, looking at another student's examination, referring to unauthorized notes or other sources of information during an exam, providing or receiving test or exam or paper answers, multiple submission of the same work for different requirements, and having another person take an exam or write a paper for you. Representing the words, ideas, or concepts of another person without appropriate attribution is plagiarism. Whenever another person's written work is used, whether it is a single phrase or longer, quotation marks must be used, and sources cited. Paraphrasing another's work, i.e., borrowing the ideas or concepts and putting them into one's "own" words, must also be acknowledged.

http://www.sa.ucsb.edu/regulations/student_conduct.aspx

Reproduction of Course Materials All course materials (class lectures and discussions, handouts, examinations, Web materials) and the intellectual content of the course itself are protected by United States Federal Copyright Law, and the California Civil Code. UC Policy 102.23 expressly prohibits

students (and all other persons) from recording lectures or discussions and from distributing or selling lectures notes and all other course materials without the prior written permission of the Instructor (see <http://policy.ucop.edu/doc/2710530/PACAOs-100>). Students are permitted to make notes solely for their own private educational use. Exceptions to accommodate students with disabilities may be granted with appropriate documentation. To be clear, in this class students are forbidden from completing study guides and selling them to any person or organization. This text has been approved by UC General Counsel.

Student Well-Being Resources

Wellness Statement: Personal concerns such as stress, anxiety, relationships, depression, cultural differences, can interfere with a student's ability to succeed and thrive. For helpful resources, please visit **Counseling & Psychological Services** at <http://caps.sa.ucsb.edu/> or at 805-893-4411 (24/7) or **Campus Advocacy Resource and Education (CARE)** at <http://wgse.sa.ucsb.edu/care/home>

If you are concerned about a friend, referrals to Student Mental Health Coordination Services can be submitted 24/7 by using the Gaucho Support & Outreach Referral Form at www.sa.ucsb.edu/REFERaGAUCHO

Academic Support: You may wish to seek expert help on notetaking and test-taking techniques, or to cope with test anxiety. Campus Learning Assistant Services (CLAS) offers individual and group study skills and course-specific workshops. If you are interested, please contact CLAS at 893-4248 or visit <http://www.clas.ucsb.edu/>.

Disabled Student Support: The Disabled Student Program (DSP), <http://dsp.sa.ucsb.edu/>, is available for all students who experience permanent or temporary medical issues while enrolled at UCSB. DSP is available to help students find reasonable accommodations when their condition may impact their success in a course. Students *must* enroll in DSP to receive any accommodations for coursework or exams. Registration can be completed online and should be done as soon as the student is aware there is a medical issue.

Gender/Sex Discrimination Policy and Student Support: Under Title IX, university students are protected from harassment and discrimination based on gender and sex. If you, or another student, feels uncomfortable or in need of support at any time related to their gender, sex, and/or sexual orientation, please contact UCSB's Resource Center for Sexual and Gender Diversity <http://wgse.sa.ucsb.edu/RCSGD/home>

For additional resources on campus, please see the “Campus Well-Being Resources” tab on our GauchoSpace.