

**HDE 120: Research Methods**  
**Spr 2024**  
**TR 10:30-11:50am PDT**  
**TLC 1215**

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**Professor Meng Huo, PhD**

**Email:** [mmhuo@ucdavis.edu](mailto:mmhuo@ucdavis.edu)

**Office hours:** M 1-2pm via [Zoom](#)/T 9:15-10:15am (1361 Hart Hall)

**Teaching Assistants:**

Sections	A01	A02	A03	A04
TA	Sarah McMillan	Bri Grosskopf	Mahek Jain	Kokul Ananth Kathiravan Kavitha
Email	<a href="mailto:sjbeard@ucdavis.edu">sjbeard@ucdavis.edu</a>	<a href="mailto:bgrosskopf@ucdavis.edu">bgrosskopf@ucdavis.edu</a>	<a href="mailto:mhkjain@ucdavis.edu">mhkjain@ucdavis.edu</a>	<a href="mailto:kkathir@ucdavis.edu">kkathir@ucdavis.edu</a>
Lab time	T 2:10-5:00pm	T 5:10-8:00pm	W 1:10-4:00pm	R 2:10-5:00pm
Office hours	W 10am-noon via <a href="#">Zoom</a>	M noon-1pm (2420 Hart) W 2-3pm via <a href="#">Zoom</a>	W 10am-noon via <a href="#">Zoom</a>	R 10-noon via <a href="#">Zoom</a>

**Course Objectives:**

This course is designed to introduce you to methodological issues in the scientific inquiry of human development and to help you become critical consumers of research. Students who successfully complete this course will be able to:

- Critically evaluate empirical research regarding research design, analysis, and interpretation of results
- Formulate scientific hypotheses
- Design a study and collect data to test a scientific hypothesis
- Use basic statistics to answer empirical questions
- Write in APA style. Communicate your research ideas and present results with clarity and precision.

**Required Textbooks:**

McBurney, D. H. & White, T. L. (2013). *Research Methods, 9<sup>th</sup> Edition*. Belmont, CA: Thompson Wadsworth.

\*Any edition 6-9 is okay\*

American Psychological Association. (2020). *Publication Manual of the American Psychological Association, 7<sup>th</sup> Edition*. Washington, DC: APA.

**Statistical software:**

SPSS is needed to complete lab assignments for this course. You can access SPSS remotely via [the Virtual Computer Lab](#) (available in the evening and on weekends). Please read instructions carefully and reach out to [labmanager@ucdavis.edu](mailto:labmanager@ucdavis.edu) for IT support. If you prefer to have SPSS installed on your computer or find it frustrating to log into the computer lab, you can purchase a license from the university or external websites, or rent the SPSS 29.0 BASE graduate pack for 6 months for \$34.95 (<https://studentdiscounts.com/>).

We will use iClicker for in class practice questions. Please make sure to follow [the instructions](#) to install a free iClicker student app, create an account using your ucdavis email address, and add this class (join code: **QGAR**). Or you can go to <https://join.iclicker.com/QGAR>.

**Prerequisites:**

Elementary statistics is a prerequisite (including Stat 13, Ed 14, Psych 41, Soc 46A, Soc 46B). It is expected that you have a basic knowledge of statistics (e.g., means, standard deviations, t-test, ANOVA, p values) before you take this course, or you will likely struggle.

### Email Correspondence:

TAs and I make every effort to respond to email within 2 working days or less. To maintain a quick response time, email correspondence should be brief. Please include **HDE 120** and a brief description in the subject line of your message to decrease the likelihood that your message gets filtered into junk email.

If you have questions that require long responses, please go to office hours.

### Enrollment Policy:

There is a heavy emphasis on written assignments. To facilitate timely feedback on assignments, we are unable to add students off the waitlist. You may only attend the section in which you are enrolled. HDE 120 is currently offered every quarter.

### Academic Integrity:

The UC Davis Code of Academic Conduct exists to support high standards of behavior and to ensure fair evaluation of student learning. If there is evidence of cheating or plagiarism, you will receive a zero on the assignment. Some examples of academic dishonesty include submitting someone else's work under your own name, collaborating with someone else on an individual project, or including another person's written words or ideas into your work without appropriate citation. Students are to complete exams and assignments individually and not discuss the content of the exams with other students. Academic dishonesty also includes using all or part of an assignment you have completed from another class and submitting these for this class. Students who violate the Code of Academic Conduct are subject to disciplinary sanctions that include censure, probation, suspension, deferred separation or dismissal from the University of California.

Unauthorized collaboration:

<https://ossja.ucdavis.edu/collaboration-when-you-can-and-when-you-cant-work-others>

Plagiarism: **We have ZERO TOLERANCE for plagiarism, period.** All identified plagiarism cases will be reported to the Office of Judicial Affairs.

<https://ossja.ucdavis.edu/avoiding-plagiarism-mastering-art-scholarship>

### Grades and Assignments:

Your final grade includes your lecture grade (40%) and lab grade (60%). Your lecture grade is based on your exams and quizzes. Your lab grade is based on your participation, weekly assignments, and the final paper.

There is no curve on your grade, which will be calculated automatically on Canvas.

Grade	Cutoff
A+	97%
A	93%
A-	90%
B+	87%
B	84%
B-	80%
C+	77%
C	74%
C-	70%
D	60%
F	<60%
<b>NO CURVE</b>	

### Lectures:

I do not take attendance but strongly suggest that you attend class **as much as you can**. The lectures include interactive discussions and practice questions. I use a whiteboard often too.

TLC 1215 has no camera. Only audio recordings will be provided.

Exams (90% of the lecture grade): There will be 3 closed-book/notes exams during class time on: **Apr 18** (Exam 1), **May 9** (Exam 2), and **June 6** (Exam 3). Exams must be taken in person. Each exam includes 30 multiple-choice questions (60 minutes). If you arrive late by 30+ minutes, you will not be allowed to take the exam anymore.

Only exam 3 is cumulative. There are different versions of the exams. Complete your exams independently.

Make-up exams are not possible except for uncontrollable emergencies—plan your schedules accordingly. If there are emergencies, please reach out to Professor Huo before the exam and provide documentation. No make-up exam shall be scheduled after designated exam time.

Quizzes (8% of the lecture grade): There will be three 8-minute quizzes on the Tuesdays of week #2 (**Apr 9**), #5 (**Apr 30**), and #8 (**May 21**), available online from 7pm to 9pm. To clarify, you can complete the quizzes any time between 7pm to 9pm but the quizzes are limited to 8 minutes. The quizzes cover materials from the prior week lectures. The purpose of having quizzes is to review key knowledge and to familiarize you with the kind of questions that you will see on exams. The quizzes will each consist of 4 questions. Only the two higher scores will be counted towards the final quiz score (i.e., the lowest one will be dropped). There are multiple versions of the quizzes. Complete your quizzes independently.

Surveys (2% of the lecture grade): There are two surveys (1pt each) on Canvas. One survey is about plagiarism (due **Apr 14**) and the other is about virtual library access (due **May 5**).

Extra credits: You may earn up to 2 points by contributing to research. More instructions re: the SONA system will be uploaded to Canvas.

### **Labs:**

Labs will take place at Hutchison 75. There are 9 mandatory lab sessions and the last one is optional.

Lab policies: Attendance is critical and mandatory, as the lab component of this course is active and participatory.

1. A total of 15% of your lab grade (i.e., 150pts) is based on participation in in-class activities and discussions. Please plan accordingly. There will be several online experiments for you to complete throughout the quarter. These experiments provide the data for your lab section to analyze. Because sections are small, full participation is necessary to statistically test hypotheses. Your participation in these experiments is worth 60 points. In addition, you will receive 10 points each time you attend lab and complete in class activities. Activities are dependent on each student's participation, so 5 points will be deducted if you arrive late or leave early by 15 minutes.

2. Please make sure to attend the lab section in which you are enrolled. If you need to miss lab, you may attend a different section that week, with permission from both TAs, to get the information missed. There will be no penalty for the first time, but 5 points will be deducted for participation if you switch labs again.

3. Papers/assignments are due at the beginning of lab. All lab assignments should be typed per APA style (7<sup>th</sup> edition). For all assignments you should upload an electronic copy as an attachment via the Assignments mechanism on Canvas. Late assignments receive an automatic deduction of 10% for each day late. "Late" means that the electronic copy is turned in more than 10 minutes after the start of lab and "day" constitutes a 24-hour period. We don't accept late assignments if they are more than 1 week late, and those assignments will receive a score of 0. The late work policy does not apply to the final paper. We do not accept any late submission of the final paper.

4. Because of the labor-intensive nature of grading the assigned course papers, TAs are unable to read/comment on drafts of papers before the due date. They are, however, happy to answer or review any specific questions you may have about the written assignments. Please contact the Academic Assistant and Tutoring Center if you need additional writing support and resources (<https://tutoring.ucdavis.edu/>).

Assignment Breakdown: 1,000 points total

Assignment	Lab Grade	Time Assigned	Time Due
<b>APA worksheet #1</b>	10	Lab 1	Lab 2
<b>APA worksheet #2</b>	10	Lab 1	Lab 3
<b>APA worksheet #3</b>	10	Lab 1	Lab 4
<b>IRB certification</b>	20	Lab 1	Lab 6
<b>t-test</b>	50	Lab 2	Lab 3
<b>One-way ANOVA</b>	100	Lab 4	Lab 5
<b>Article critique</b>	100	Lab 4	Lab 6
<b>Two-way ANOVA</b>	100	Lab 5	Lab 7
<b>Group project proposal</b>	150	Lab 5	Lab 8
<b>Final paper</b>	300	Lab 8	See next page
<b>Participation</b>	150		
<b>Total</b>	1,000		

## Resources:

Please note that your professor and TA are required to report certain information related to students' health and safety (e.g., if we learn of sexual violence or if we suspect a student or others may be at risk of harm). Please be aware that if you report anything personal that falls into one of these categories during any assignment or when meeting with us, we may have to report this information to the relevant reporting agency. If you are experiencing distress and would like to discuss this with a confidential resource, you can ask the professor or TA, and we can connect you with confidential resources.

Please see [this link](#) for a summary of resources. In addition, please check out the campus resources below.

**Student Academic Success Center:** <http://lsc.ucdavis.edu>. Location: 2205 Dutton Hall. (530) 752-2013. They offer appointments and drop-in consultations on writing. Clear and correct writing is a requirement in this class, so please take advantage of the SASC resources if you need help with your basic writing skills.

**Student Disability Center (SDC):** <http://sdc.ucdavis.edu>. Location: 54 Cowell Building. (530) 752-3184.

Determine eligibility for academic accommodations; provide specialized academic support; request accommodations; notetaker services; mobility assistance.

- UC Davis is **committed to educational equity** in the academic setting, and in serving a diverse student body. I encourage all students who are interested in learning more about the Student Disability Center (SDC) to contact them directly. If you require academic accommodations, please submit your SDC Letter of Accommodation as soon as possible, ideally within the first two weeks of this course.

**Graduate Writing Consultations:** <http://writing.ucdavis.edu/programsservices/graduate-writing-consultations>.

Location: 109 Voorhies. (530) 752-6283. One-on-one appointments.

**Counseling Services:** <https://shcs.ucdavis.edu/counseling-services>. Location: 219 North Hall. (530) 752-2349.

Mental health and psychological services, including individual counseling, group services, community advising network, career counseling, community referrals, eating disorder services. Individual Counseling is confidential short-term therapy available to all registered UC Davis students at no charge. Counseling Services are by appointment only. For immediate mental health crisis assistance: Call to schedule an appointment in Acute Care at the Student Health and Wellness Center 530-752-2349; After-hours assistance by phone 530-752-2349 (follow the prompts); Yolo County Suicide Prevention - available 24 hours every day: 530-756-5000.

**Student Health and Wellness Center:** <https://shcs.ucdavis.edu/medical-services>. Location: 930 Orchard Road. (530) 752-2349. Medical services, including mental health acute care services on the 1st floor during normal hours of operation.

**Center for Advocacy, Resources & Education (CARE):** <http://care.ucdavis.edu/>. Call/email CARE for campus location. (530) 752-3299. [ucdcare@ucdavis.edu](mailto:ucdcare@ucdavis.edu). On-campus, confidential resource for anyone who has experienced or is concerned for someone who has experienced any form of sexual violence, including sexual assault, sexual harassment, domestic/dating violence, and stalking. Provides 24/7 emergency response, crisis intervention, and support.

**AB540 and Undocumented Student Center:** <http://undocumented.ucdavis.edu/>. Location: 1003 Student Community Center. (530) 752-9538. Undocumented student and financial support; grants; legal advice; emotional and academic support; and community outreach.

**International & Academic English Program:** <http://esl.ucdavis.edu>. Location: 1350 The Grove (Surge III). (530) 752-6799. Provides language courses and summer intensive programs, coordinating with academic advising, etc.

**Services for International Students and Scholars (SISS):** <https://siss.ucdavis.edu/>. Location: University House. (530) 752-0864. Assists international students and scholars in maintaining their legal status while in the United States. SISS also provides orientation, assistance, information, and referral regarding financial, personal, cultural, and academic concerns.

**The Mind Spa:** Located on the 2nd floor of the Student Health and Wellness Center in the CAPS Clinic: <https://shcs.ucdavis.edu/services/mindspa.html>. It offers the use of massaging recliners, biofeedback, insomnia programs, yoga classes, and mindful relaxation resources, free of charge. It offers student advocacy services provided by trained listeners with skills to help students process and understand their thoughts and feelings.

**Health 34:** <https://fire.ucdavis.edu/health34>. Call (530)754-3434 for non-emergency support and navigation to services for mental health and basic medical care.

**Readings and Class Schedule (Please also check Modules on Canvas):**

The readings for the course should be read the week they are assigned and will appear on the exams. (MW = text; APA = APA manual)

Week	Reading (VER. 9)	Lab
1. Tues Apr 2 Thurs Apr 4	MW: Ch 1: Psychology and Science Ch 2: Developing a Research Question Ch 5: Variables APA: pp. 3-10, 29-49, 112-164	Lab 1 Exp #1
2. <b>Tues Apr 9 QUIZ 1</b> Thurs Apr 11	MW: Ch 4: Writing in Psychology Ch 6: Validity APA: pp. 165-250	Lab 2
3. Tues Apr 16 <b>Thurs Apr 18 EXAM 1</b>	MW: Ch 3: Ethics in Research Ch 14: Data Exploration: Graphic and Descriptive Techniques APA: pp. 11-26, 71-93, 225-309, 312-359	Lab 3
4. Tues Apr 23 Thurs Apr 25	MW: Ch 7: Control Ch 10: True Experiments: Single Factor Designs	Lab 4 Exp #2
5. <b>Tues Apr 30 QUIZ 2</b> Thurs May 2	MW: Ch 11: True Experiments: Factorial Designs	Lab 5 Exp #3
6. Tues May 7 <b>Thurs May 9 EXAM 2</b>	MW: Ch 15: Data Exploration: Inferential Statistics	Lab 6
7. Tues May 14 Thurs May 16	MW: Ch 12: Single-Subject Experiments Ch 13: Quasi Experiments	Lab 7
8. <b>Tues May 21 QUIZ 3</b> Thurs May 23	MW: Ch 8: Nonexperimental Research: Observational, Archival, and Case-Study Research	Lab 8
9. Tues May 28 Thurs May 30	MW: Ch 9: Nonexperimental Research: Survey Research	Lab 9
10. Tues June 4 <b>Thurs June 6 EXAM 3</b>	Epilogue: Biases and Limitations of Experimental Psychology	Lab 10 (optional)
<b>Sun June 9 11:59pm</b>	<b>Final paper due Via Assignments on Canvas</b>	<b>1 electronic copy</b>

*Note.* The final paper is considered the final exam for this course. Late work policy does NOT apply. If you do not turn in the paper by the end of June 9, you will receive a score of zero. Arrangements can be made to turn in the paper to TA early, if desired.