



Master Course Syllabus

For additional course information, including prerequisites, corequisites, and course fees, please refer to the Catalog: <https://catalog.uvu.edu/>

Semester: Spring

Year: 2025

Course Prefix: PSY

Course and Section #: 3030-001

Course Title: Research Methods for Psychology

Credits: 4

Course Description

Explains the logic of the classical true experiment and how it permits causal inferences. Compares and contrasts the benefits and drawbacks of quasi-experimental and correlational research designs. Includes the design of an empirical psychological study. Covers compliance with guidelines for ethical research as codified in law and the American Psychological Association's ethics code. Requires collection, analysis, and presentation of quantitative data for an empirical psychological study. Includes a lab.

Course Attributes

This course has the following attributes:

- General Education Requirements
- Global/Intercultural Graduation Requirements
- Writing Enriched Graduation Requirements
- Discipline Core Requirements in Program
- Elective Core Requirements in Program
- Open Elective

Other: *Click here to enter text.*

Instructor Information

Instructor Name: Dr. Maddy Peterson

Student Learning Outcomes

Upon successful completion, students should be able to...

1. Explain the logic of the classical true experiment and how it permits causal inferences.
2. Compare the benefits and drawbacks of quasi-experimental and correlational research designs.
3. Collaborate with peers to design an empirical psychological study.
4. Comply with guidelines for ethical research as codified in law and the American Psychological Association's ethics code.
5. Interpret quantitative data for an empirical psychological study.

This course is required for psychology majors.

Course Materials and Texts

Research Methods in Psychology: Evaluating a World of Information (4th Edition). Beth Morling ISBN-13: 978-0393617542

The following scientific journal articles:

1. Astur, R. S., St Germain, S. A., Baker, E. K., Calhoun, V., Pearson, G. D., & Constable, R. T. (2005). fMRI hippocampal activity during a virtual radial arm maze. *Applied psychophysiology and biofeedback*, 30, 307-317. <https://doi.org/10.1007/s10484-005-6385-z>
 2. Birditt, K. S., Turkelson, A., Polenick, C. A., Cranford, J. A., Smith, J. A., Ware, E. B., & Blow, F. C. (2024). Alcohol use and mortality among older couples in the United States: Evidence of individual and partner effects. *The Gerontologist*, 64(2), gnad101. <https://doi.org/10.1093/geront/gnad101>
 3. Janzen, T. B., Paneduro, D., Picard, L., Gordon, A., & Bartel, L. R. (2019). A parallel randomized controlled trial examining the effects of rhythmic sensory stimulation on fibromyalgia symptoms. *PLoS One*, 14(3), e0212021. <https://doi.org/10.1371/journal.pone.0212021>
 4. Le Floch, A., & Ropars, G. (2017). Left-right asymmetry of the Maxwell spot centroids in adults without and with dyslexia. *Proceedings of the Royal Society B: Biological Sciences*, 284(1865), 20171380. <https://doi.org/10.1098/rspb.2017.1380>
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Course Requirements

Course Assignments, Assessments, and Grading Policy

- Class activities: These are short discussions, worksheets, or discussions that are completed in-class. There is one activity per lecture (12 activities x 5 points = 60 points).
- Project lab assignments: There are 12 project lab assignments that are due throughout the semester. Lab assignments include activities related to research methods and milestones for designing your own research project (12 project labs x 10 points = 120 points).
- Skills lab assignments: There are 12 skills lab assignments that are due throughout the semester. Skills lab assignments are designed to help you refresh your writing and statistics skills, including using statistical software and reporting results in APA format (12 skills labs x 10 points = 120 points).
- Module quizzes: There are 12 quizzes, one per module, which are based on the assigned readings and in-class lectures. Each quiz consists of five multiple-choice with elaboration questions. For these questions, you select the answer to a multiple-choice question and then explain why you selected that answer (12 quizzes x 10 points = 120 points).
- Teamwork functioning activities: These activities are short teamwork-related surveys throughout the semester. These activities exist to check-in about team functioning (2 activities x 5 points = 10 points).
- Research paper: There is one final research paper due at the end of the semester. This research paper will be the final product of a semester's worth of work of designing, running, and analyzing the data from a group research project. Lab assignments throughout the semester will guide through the process of writing your research paper. Your group may decide whether to submit one final research paper or individual papers for each group member (100 points).
- Poster presentation: In addition to a research paper, your group will be designing and presenting a poster about your research project. This is intended to be a creative and celebratory way to share your findings with the class. You will create and share your poster during our scheduled finals time (50 points).

Final grades will be assigned as follows:

A = 94-100

B- = 80-82

D+ = 67-69

A- = 90-93

C+ = 77-79

D = 63-66

B+ = 87-89
B = 83-86

C = 73-76
C- = 70-72

D- = 60-62
E = 0-59

Required or Recommended Reading Assignments

All required readings are listed with the modules below.

General Description of the Subject Matter of Each Lecture or Discussion

1. Module 1:
 - a. Required reading: Chapter 2 Sources of Information: Why Research is Best and How to Find It
 - b. Topic: How do we know things?
2. Module 2:
 - a. Required reading: Chapter 3 Three Claims, Four Validities: Interrogation Tools for Consumers of Research
 - b. Topic: What can research tell us?
3. Module 3:
 - a. Required reading: Chapter 4 Ethical Guidelines for Psychological Research
 - b. Topic: How do we conduct research ethically?
4. Module 4:
 - a. Required reading: Chapter 5 Identifying Good Measurement
 - b. Topic: How do we measure the mind?
5. Module 5:
 - a. Required reading: Chapter 6 Surveys and Observations: Describing What People Do
 - b. Topic: How can we measure what people do?
6. Module 6:
 - a. Required reading: Chapter 7 Sampling: Estimating the Frequency of Behaviors and Beliefs
 - b. Topic: When do our results generalize?
7. Module 7:
 - a. Required reading: Chapter 10 Introduction to Simple Experiments
 - b. Topic: What is an experiment?
8. Module 8:
 - a. Required reading: Chapter 11 More on Experiments: Confounding and Obscuring Variables
 - b. Topic: What is a good experiment?
9. Module 9:
 - a. Required reading: Chapter 12 Experiments with More Than One Independent Variable
 - b. Topic: How can experiments test more complex ideas?
10. Module 10:
 - a. Required reading: Chapter 8 Bivariate Correlational Research
 - b. Topic: What do bivariate correlations tell us?
11. Module 11:
 - a. Required reading: Chapter 13 Multivariate Correlational Research
 - b. Topic: How can correlations get closer to causation?
12. Module 12:
 - a. Required reading: Chapter 14 Replication, Generalization, and the Real World
 - b. Topic: When is a study trustworthy and relevant to the real world?

13. Module 13:
 - a. Required reading: One of four scientific journal articles, which are 1) Astur et al. (2005), 2) Birditt et al. (2024), 3) Janzen et al. (2019), and 4) LeFloch & Ropars (2017)
 - b. Topic: Where do we go from here?
14. Module 14:
 - a. Required reading:
 - i. Statistics Review – Descriptive Statistics (starting on p. 467)
 - ii. Statistics Review – Inferential Statistics (starting on p. 469)
 - b. Topic: How do I analyze my data?
15. Module 15:
 - a. Required reading: None
 - b. Topic: How do I present research?

Required Course Syllabus Statements

Generative AI

The use of generative AI tools (e.g., ChatGPT, Google Bard, etc.) is permitted for the following activities:

- Brainstorming and refining your ideas
- Fine-tuning your research questions; don't accept anything AI generates at face value without checking it critically
- Finding accurate information on your topic
- Drafting an outline to organize your thoughts
- Checking grammar and style

The use of generative AI tools is not permitted in this course for the following activities:

- Impersonating you in classroom contexts, such as by using the tool to compose discussion board prompts/responses assigned to you or content that you put into a Teams/Canvas chat
- Completing group work that your group has assigned to you
- Writing entire sentences, paragraphs, or papers to complete class assignments

You are responsible for the information you submit based on an AI query (for instance, that it does not violate intellectual property laws or contains misinformation or unethical content). Your use of AI tools must be appropriately documented and cited to stay within university policies on academic honesty.

Any student work submitted using AI tools should clearly indicate what work is the student's work and what part is generated by the AI. In such cases, no more than 25% of the student work should be generated by AI. If any part of this is confusing or uncertain, please get in touch with the course instructor for a conversation before submitting your work. Additional university resources regarding the use of AI are available through the UVU Office of Teaching and Learning.

Using Remote Testing Software

This course does not use remote testing software.

This course uses remote testing software. Remote test-takers may choose their remote testing locations. Please note, however, that the testing software used for this may conduct a brief scan of remote test-takers' immediate surroundings, may require use of a webcam while taking an exam, may

require the microphone be on while taking an exam, or may require other practices to confirm academic honesty. Test-takers therefore shall have no expectation of privacy in their test-taking location during, or immediately preceding, remote testing. If a student strongly objects to using test-taking software, the student should contact the instructor at the beginning of the semester to determine whether alternative testing arrangements are feasible. Alternatives are not guaranteed.

Required University Syllabus Statements

Accommodations/Students with Disabilities

Students needing accommodations due to a permanent or temporary disability, pregnancy or pregnancy-related conditions may contact UVU [Accessibility Services](#) at accessibilityservices@uvu.edu or 801-863-8747.

Accessibility Services is located on the Orem Campus in BA 110.

Deaf/Hard of Hearing students requesting ASL interpreters or transcribers can contact Accessibility Services to set up accommodations. Deaf/Hard of Hearing services can be contacted at DHHservices@uvu.edu

DHH is located on the Orem Campus in BA 112.

Academic Integrity

At Utah Valley University, faculty and students operate in an atmosphere of mutual trust. Maintaining an atmosphere of academic integrity allows for free exchange of ideas and enables all members of the community to achieve their highest potential. Our goal is to foster an intellectual atmosphere that produces scholars of integrity and imaginative thought. In all academic work, the ideas and contributions of others must be appropriately acknowledged and UVU students are expected to produce their own original academic work.

Faculty and students share the responsibility of ensuring the honesty and fairness of the intellectual environment at UVU. Students have a responsibility to promote academic integrity at the university by not participating in or facilitating others' participation in any act of academic dishonesty. As members of the academic community, students must become familiar with their [rights and responsibilities](#). In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, assessments, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Likewise, instructors are responsible to clearly state expectations and model best practices.

Further information on what constitutes academic dishonesty is detailed in [UVU Policy 541: Student Code of Conduct](#).

Equity and Title IX

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law, including Title IX and 34 C.F.R. Part 106, in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. Inquiries about nondiscrimination at UVU may be directed to the U.S. Department of Education's Office

for Civil Rights or UVU's Title IX Coordinator at 801-863-7999 – TitleIX@uvu.edu – 800 W University Pkwy, Orem, 84058, Suite BA 203.

Religious Accommodation

UVU values and acknowledges the array of worldviews, faiths, and religions represented in our student body, and as such provides supportive accommodations for students. Religious belief or conscience broadly includes religious, non-religious, theistic, or non-theistic moral or ethical beliefs as well as participation in religious holidays, observances, or activities. Accommodations may include scheduling or due-date modifications or make-up assignments for missed class work.

To seek a religious accommodation, a student must provide written notice to the instructor and the Director of Accessibility Services at accessibilityservices@uvu.edu. If the accommodation relates to a scheduling conflict, the notice should include the date, time, and brief description of the difficulty posed by the conflict. Such requests should be made as soon as the student is aware of the prospective scheduling conflict.

While religious expression is welcome throughout campus, UVU also has a [specially dedicated space](#) for meditation, prayer, reflection, or other forms of religious expression.