

PSYC 205-01 Research Methods with Lab – Fall 2022

MW 12:50 PM – 4:00 PM

JHS 001

Welcome to Research Methods!

I'm delighted we get to spend the semester together. I'm your instructor, Dr. Elyssa Twedt (pronounced: "ah-liss-ah tweet"). I prefer to be called Elyssa, but if you are uncomfortable using a more informal greeting, then Professor Twedt or Dr. Twedt are also acceptable.

I encourage you to talk with me regularly throughout the semester. In addition to chatting with me before or after class, you can email, call, or schedule a meeting:



etwedt@stlawu.edu
Expect responses
within 24 hours, M – F
8am - 5pm



315-229-5114



Schedule a meeting
Flint 107

COURSE DESCRIPTION

What will we learn in this course?

Research Methods is a foundational course in the psychology major and will prepare you for upper-level lab courses. But even if you do not plan to have a career in psychology or research, the skills and knowledge acquired in this course will transfer to many domains of your professional and personal lives. We will cover topics that teach us how to be consumers and producers of research. To be an effective *consumer* of research requires that you think critically, integrate sources of information, and evaluate the validity of scientific claims. To be a *producer* of research requires that you know how to develop a research question, form testable hypotheses, design studies, analyze data, interpret results, and communicate findings. This course will emphasize general skills of critical thinking, information and data literacy, oral and written communication, and collaboration.

What is the structure of this course?

This is a studio model course in which lecture and lab are blended together during each three-hour class. Class will include a mixture of lecture, discussion, group activities, project development, and workshops emphasizing writing, statistics, and scientific communication.

Materials, activities, and assignments will be organized in Canvas. Every Monday (after 12pm), you can access the Weekly Module and review what needs to be completed for the week. I will post PowerPoint slides to Canvas before each class so that you may take notes directly on the slides if you choose.

Prerequisites: PSYC 101, STAT 113, and one additional PSYC course

Note: Research methods cannot be taken pass/fail.

LEARNING OBJECTIVES

Enduring Understandings

- Become a more informed and critical consumer of scientific research to guide decision-making
- Understand the personal and social implications of scientific research including its role in building an inclusive society that embraces diversity
- Demonstrate an appreciation for ethical, transparent, and reproducible research practices
- Enhance teamwork and project management skills
- Demonstrate how to communicate to different audiences using written, oral, and visual methods

Specific Course Goals

- Develop information and data literacy skills including how to find, summarize, evaluate, and integrate research findings
- Learn how to conceptualize, design, and conduct both simple and complex psychological studies
- Evaluate methodologies utilized in both human and animal research
- Learn how to analyze and visualize data using SPSS and Excel, and how to interpret results in both graphical and written form
- Demonstrate proficiency in APA-style writing guidelines

REQUIRED MATERIALS

Books:

1. Morling, B. (2021). *Research methods in psychology with SPSS guide: Evaluating a world of information* (4th Ed.). W. W. Norton & Company Inc. 9780393893731
2. American Psychological Association (2020). *Publication manual of the American Psychological Association* (7th Ed.). APA.

Course Tools:

- Canvas: To access supplemental readings, videos, audio recordings, and other class materials.
- SPSS and Excel: To organize, analyze, and visualize data
- OneDrive: To collaborate on group assignments

PARTICIPATION AND ATTENDANCE

I have high expectations and I expect you to attend all class sessions. However, I understand that occasionally there may be extenuating circumstances that prevent you from attending class. If you need to miss class, it is courtesy to email me before class (if possible) or as soon as possible after class. If you miss more than one class in a row and I have not heard from you, I will send you an email to check-in. You should also check the syllabus and Canvas for any assignment deadlines.

I do not grade attendance but I will note who attends. The content for this course is cumulative and it will become difficult to keep up with coursework if you are habitually late or absent from class. This course also emphasizes group work and thus your absence will affect your group members. In addition, we will regularly engage in discussions, activities, and demonstrations during class that will deepen your understanding of the material. Though I post the PowerPoint lecture slides before each class, not all content is available on the posted slides and I often use the white board during class to supplement the slides. And, class is fun and interesting! Come learn something that you can share with your friends and family.

HOWEVER: If you feel sick, please stay home. Keeping students, faculty, staff, and community members safe and healthy is a priority. We will create a plan for the missed material if needed.

Being an engaged student is a vital component of this course. Make your peers glad you showed up to class! Participation comes in variety of forms including actively participating in discussions, contributing to group activities, being prepared for class, and demonstrating attentive, respectful, and active listening. You can also participate by attending office hours or speaking with me before and after class. You will feel better prepared for class if you read, or at least skim, the assigned textbook readings before class. If you struggle with participating in class and would like to improve this skill, please feel free to speak with me.

To help you stay engaged and provide accountability, you will be assigned to peer support groups. Groups are comprised of 3-4 students with whom you will meet throughout the semester to discuss your projects and other work completed in the course.

ASSIGNMENTS

Exams

Two semester exams consisting of multiple choice, short answer, and long answer questions. All exams are cumulative to some degree because each week in this course builds on the previous weeks. We will spend time during the class period before each exam reviewing for the test and part of the class period after each exam discussing the answers.

Lab Practical

You will complete a lab practical for which you will need to analyze data in SPSS, interpret the analysis output, and present the results. Throughout the semester, we will work towards proficiency in using SPSS as a data analysis tool, which will prepare you for the lab practical.

Learning Checks

Some weeks there will be a learning check due at the end of the week. Learning checks may cover readings, lecture, and/or lab material. The purpose of regular learning checks is to give you repeated and distributed practice with material, which improves learning. Learning checks also provide an opportunity to check your understanding of material before moving on to new concepts, which will be especially helpful in this course because it is cumulative.

Homework

We will regularly complete assignments outside of class that provide opportunities to engage more deeply with the material. For example, you will submit project drafts for peer and instructor feedback, SPSS tutorials, practice writing in APA-style, and complete other assignments related to the weekly units. These assignments will be graded for completion. Some, but not all, homework assignments are listed on the course schedule in the syllabus. The rest will be posted as needed on Canvas.

Research Projects

One effective way to learn about research methods is to conduct your own research studies. Throughout the semester, you will complete three projects that build on the skills you develop during lecture and lab. You will work on each project in stages and submit drafts of your work for peer and instructor review. I will provide more details for each project during class.

- **Project 1: Operant Conditioning Animal Project**
 - An observational study of animal behavior in which you will investigate how different reinforcement schedules affect bar pressing behavior of rats in an operant chamber. You will design a poster presentation to communicate your findings. This is a group project.
- **Project 2: Simulated Jury Study**
 - A survey experiment in which you will investigate how physical characteristics and situational factors influence judgments made about a person. You will collect data from your peers and write a full APA-style paper. This is an individual project.
- **Project 3: Research Proposal**
 - A research proposal in which you will design a psychological experiment. This project will be completed throughout the semester, culminating in an oral presentation and written proposal. This is an individual project.

Grades

Assignment	% of Grade
Exams (2 each at 15%)	30%
SPSS Lab Practical	10%
Learning Checks	10%
Homework	5%
Project 1 – Operant Lab Poster Presentation	10%
Project 2 – Simulated Jury Study Paper	20%
Project 3 – Research Proposal	
Oral Presentation	7.5%
Pre-registration	7.5%
Total	100%

*Percentages may be adjusted if assignments or activities change during the semester.

Your final course grade will be based on the percentage of available points that you earn. The following table provides the cut-offs I will use to convert those percentages into the grades that will be assigned as course grades on the 4-point scale:

94% = 4.0	85% = 3.25	76% = 2.5	67% = 1.75	58% = 1
91% = 3.75	82% = 3.0	73% = 2.25	64% = 1.5	Below 58% = 0.0
88% = 3.5	79% = 2.75	70% = 2.0	61% = 1.25	

NOTE: You may not take this course pass/fail.

Policies

Respect for Diversity and Inclusion

It is vital that we create a classroom environment that is respectful, inclusive, and supportive of diverse opinions, values, and experiences. Our goal is to have a learning space where all students feel comfortable to contribute and collaborate with their peers. I am actively working to include more classroom resources and examples that reflect diverse voices and perspectives across multiple dimensions including race, ethnicity, gender identity, sexual orientation, religion, class, and disability. I expect everyone to be respectful and open towards each other.

Assignment Submission

Most assignments will be submitted through Canvas. Save your documents as lastname_assignmentname in Word. Formatting instructions will be provided for each assignment, but the default is to use a font such as Times New Roman, Calibri, or Arial, font size 12, double-spaced. A single-spaced header with your name, date, and assignment name should be included in the header of the document.

Make-up Exams

Make-up exams will only be granted for the following special circumstances. 1) an official, University sponsored event that requires you to be off campus during the regularly scheduled examination time. Please notify me as soon as you learn your schedule, but at least one week in advance; 2) a medical emergency; 3) a family emergency. You must notify me of your extenuating circumstances before the scheduled exam, unless you are unable to do so in an emergency. I will not make special accommodations for students who extend their breaks by leaving earlier or returning later than dates indicated by SLU's official academic calendar. Therefore, it is imperative that you note the date of each exam at the beginning of the semester and plan for travel accordingly.

Late Assignments

When determining assignment deadlines, I consider how assignments will most effectively prepare you for class and reinforce recently learned material. I also consider my own schedule so that I have time to provide quality feedback in a timely manner. Therefore, just as I aim to return graded assignments quickly, I expect you to adhere to deadlines outlined in the course schedule. However, we all lead busy lives and often have competing demands for our time. You may find yourself overwhelmed one week when all your classes have the same deadlines, or you may fall behind on work after an illness. To accommodate for these circumstances, I have built in some flexibility for assignment submissions.

For each assignment, there is a 24-hour grace period in which you can submit your assignment late, without penalty. This policy does not apply to exams, which cannot be completed after the due date except for extenuating circumstances.

However, after the 24-hour extension, the following late assignment policy will be used: 5% will be deducted from your assignment grade for every additional 24-hour period after the extension period. For example, 5% deduction if submitted within 24-hours after extension period, 10% deduction for next 24-hours, etc. After 1 week, late submissions will no longer be accepted to allow for timely feedback.

In extenuating circumstances, the late policy may be modified; these situations will be evaluated on a case-by-case basis.

Personal Electronics

Please bring a laptop to every class. We will often need a computer for group activities and conducting data analyses. I recognize that computers offer endless distractions, but I trust that you'll use them responsibly in class. Please do what you can to limit distractions – e.g., close other browser tabs, keep chat apps closed, and silence your cell phone. I will build in breaks throughout class so you can check email and texts.

Office Hours

I set aside three hours per week for office hours. You can use Canvas to sign-up for a meeting time during office hours. During office hours we can review lecture material, discuss study strategies, strengthen participation skills, review test material, or work on whatever aspects of the course (or college) you find challenging. Sometimes, students are hesitant to visit me during office hours until after the first exam. However, I encourage you to visit with me before Exam 1 to introduce yourself and discuss how we can work together to have a successful semester. Therefore, if you visit my office hours or make an appointment to meet with me before Exam 1 (8/24 – 9/25), you will earn one bonus point on Exam 1.

Contacting Me

I truly love talking to my students! I encourage you to ask me questions and to share interesting resources related to course content. There are several ways for you to do this including attending office hours (see above), scheduling an appointment, and emailing me. Please check the syllabus before emailing me about scheduling or course policies. I ask that you also check your email regularly, as I sometimes share class announcements, follow-ups to lecture material, and interesting stuff I find related to course content. I will respond to your emails within 24 hours if received Mon – Fri, 8 AM – 5 PM EST. For emails received over the weekend, I will respond the next Monday morning.

Academic Integrity

All assignments submitted must adhere to the university honor code as stated in the [Student Handbook](#). All work must be completed independently, except when specified as group work. All written work must be in your own words and properly cited following APA 7th edition guidelines. Some examples of academic dishonesty are: using another author's or student's work as your own, failing to properly cite a source when quoting or summarizing, cheating on exams, and handing in work previously used in another course. If you have any questions about the honor code or plagiarism, please ask me.

Student Accessibility Services

Your experience in this class is important to me. It is the policy and practice of St. Lawrence University to create inclusive and accessible learning environments consistent with federal and state law. If you have already established accommodations with the Student Accessibility Services Office, please meet with them to activate your accommodations so we can discuss how they will be implemented in this course.

If you have not yet established services through the Student Accessibility Services Office but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), please contact the Student Accessibility Services Office directly to set up a meeting to discuss establishing with their office. The Student Accessibility

Services Office will work with you on the interactive process that establishes reasonable accommodations.

Color Vision Deficiency:

If you are color vision deficient, the Student Accessibility Services office has on loan glasses for students who are color vision deficient. Please contact the office to make an appointment.

For more specific information about setting up an appointment with Student Accessibility Services please see the options listed below:

Telephone: **315.229.5537**

Email: studentaccessibility@stlawu.edu

For further information about Student Accessibility Services, you can check the website at <https://www.stlawu.edu/offices/student-accessibility-services>

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Schedule

I have tried to anticipate the schedule of readings, assignments, and due dates to the best of my ability. However, Research Methods has many “moving parts” and the pace with which we complete learning activities will vary. Thus, the schedule may need to be modified. Any changes will be made in consultation with you. These changes will be for your benefit to ensure that you have adequate preparation and enough time to complete assignments. Note that the schedule below lists weekly course topics, textbook readings, and deadlines for major assignments and exams. Assignment materials and additional weekly tasks (e.g., homework) will be outlined within the Canvas Module or described in class. Please check Canvas Lessons every week so you know what is expected and can plan your schedule accordingly.

OL = Operant Lab

SJS = Simulated Jury Study

RP = Research Proposal

Week	Date	Topic	Textbook	Assignments Due
Unit 1 – Thinking like a Psychological Scientist				
1	Wed 8/24	<ul style="list-style-type: none">• Introduction	Ch. 1	<ul style="list-style-type: none">• HW: Student Information Form (Sun 8/28)
2	Mon 8/29 & Wed 8/31	<ul style="list-style-type: none">• Scientific Inquiry & Evaluating Sources of Information	Ch. 2	<ul style="list-style-type: none">• Learning Check 1 (Sun 9/4)• HW: Plagiarism Tutorial (Sun 9/4)
3	Mon 9/5 & Wed 9/7	<ul style="list-style-type: none">• Claims and Validities• Ethics	Ch. 3 Ch. 4	<ul style="list-style-type: none">• Learning Check 2 (Sun 9/11)• HW: CITI Ethics Training (Sun 9/11)
4	Mon 9/12 & Wed 9/14	<ul style="list-style-type: none">• Measurement: Reliability & Validity• OL: Introduction and Data Collection (Mon/Wed)	Ch. 5	<ul style="list-style-type: none">• Learning Check 3 (Sun 9/18)

Unit 2 – Research Designs				
5	Mon 9/19 & Wed 9/21	<ul style="list-style-type: none"> Survey and Observational Research SPSS: Working with datasets; descriptive stats OL: Data Collection (Mon/Wed) 	Ch. 6 p. 467 - 488	
6	Mon 9/26 & Wed 9/28	<ul style="list-style-type: none"> Sampling and Random Assignment OL: Data Collection (Mon) OL: Data Visualization and Analysis (Wed) 	Ch. 7 p. 560 - 563	<ul style="list-style-type: none"> Exam 1 (Mon 9/26)
7	Mon 10/3 & Wed 10/5	<ul style="list-style-type: none"> Correlation OL: Poster Presentations (Wed) SJS: Introduce Project 	Ch. 8	<ul style="list-style-type: none"> OL: Draft Poster (Mon 10/3) OL: Final Poster (Wed 10/5) Learning Check 4 (Sun 10/9)
8	Mon 10/10 & Wed 10/12	<ul style="list-style-type: none"> Introduction to Simple Experiments SPSS: T-Tests and one-way ANOVA SJS: Data collection begins (Mon) 	Ch. 10	
Unit 3 - Non-Experimental & Complex Designs				
9	Mon 10/17 & Wed 10/19	<ul style="list-style-type: none"> Introduction to Simple Experiments SPSS: One-way and factorial ANOVA SJS: Data collection ends (Tues) 	p. 491 - 521	<ul style="list-style-type: none"> SJS Project: Intro Draft & Reference list (Wed 10/19) Learning Check 5 (Sun 10/23)
10	Mon 10/24 & Wed 10/26	<ul style="list-style-type: none"> Experiments with Multiple Variables SPSS: Factorial ANOVA SJS: Analyze Data (Mon/Wed) 	Ch. 12	<ul style="list-style-type: none"> Learning Check 6 (Sun 10/30)
11	Mon 10/31 & Wed 11/2	<ul style="list-style-type: none"> Experiments with Multiple Variables SJS: Finish data analysis; Figures and Tables 		<ul style="list-style-type: none"> Exam 2 (Wed 11/2) SJS Project: Method & Results Draft (Sun 11/6)
12	Mon 11/7 & Wed 11/9	<ul style="list-style-type: none"> Quasi-experiments & Small-N designs SJS: Discussion Outline 	Ch. 13	<ul style="list-style-type: none"> Learning Check 7 (Sun 11/13) RP: Pre-registration draft (Sun 11/13)

Unit 4 – Final Project & SPSS Practical

13	Mon 11/14 & Wed 11/16	<ul style="list-style-type: none"> • Open Science: Transparency, Replication, and Reproducibility • SJS Workshop: Pulling it all together 	Ch. 14	<ul style="list-style-type: none"> • SJS: Final Paper (Friday 11/18)
	Mon 11/21 & Wed 11/23	<ul style="list-style-type: none"> • NO CLASS – THANKSGIVING BREAK 		
14	Mon 11/28 & Wed 11/30	<ul style="list-style-type: none"> • RP: Oral Presentation Workshop • SPSS: Prep for lab practical 		<ul style="list-style-type: none"> • RP: Final pre-registration (Wed 11/30)
15	Mon 12/5 & Wed 12/7	<ul style="list-style-type: none"> • RP Oral Presentations (Mon/Wed) 		<ul style="list-style-type: none"> • RP: Final oral presentation slides
16	Mon 12/12	<ul style="list-style-type: none"> • FINAL EXAM WEEK 		<ul style="list-style-type: none"> • SPSS Lab Practical