



**Syllabus for PSYC 221-001&002
Research Design & Statistics 2
Department of Psychology
Fall 2025**

Instructor: Dr. Maggie Polk

Office: AH 0129

Class Location: Alumni Hall 0401

Lab Location: Engineering Building 1140

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Office Hours: M/W: 11-12:30 /by appointment

Class Meeting time: M/W 10-10:50am

Lab Meeting time: 001 – 10-11am
002 – 9-10am

Graduate Teaching Assistant: Jenna Fisher

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Course Description: In this course we will explore experimental methods for designing psychological studies and statistics used to analyze and interpret the data. Building off what we done in PSYC 220, by the end of the semester you will learn how to read, understand and critically evaluate statistical data. You will also generate testable hypotheses, design a research study and collect data, and calculate appropriate statistics. Finally, you will also learn to write and present an APA paper. Overall, my goal is to make statistics and research methods less scary, and provide you a foundation for understanding research in the real world.

Course Objectives:

- **Research & Statistic Skills**
 - You will learn the basics and major concepts of descriptive and inferential statistics, and then be able to decipher which type of statistics are used in which scenarios. In addition, you will learn the techniques of the whole research process: conducting a literature review, developing research ideas, deciding which type of method to use, gathering and analyzing data, and communicating results.
- **Writing Skills**
 - You will learn how to write in APA style and improve your writing skills.
- **Critical and Creative Thinking**
 - You will learn how to transform curiosity into testable research questions, and how to critically evaluate these questions.

Textbook:

Gravetter, F. J. & Forzano, L. B. (2018). *Research methods for the behavioral sciences* (6th ed.). Belmont, CA: Cengage. *Note: will be labeled as R.M.*

Gravetter, F. J., Wallnau, L. B., Forzano, L. B., & Witnauer, J. E. (2018). *Essentials of statistics for the behavioral sciences* (10th ed.). Cengage. *Note: will be labeled as Stats*

Undergraduate students can rent textbooks from SIUE. Please visit the [Textbook Service website](#) for more information. For off-campus classes, the textbook may be shipped to you. Look for the option “Off-Campus Classes have special instructions, click here for these.” Note: shipping time may take up to two weeks.

Other course materials

Additional readings may be assigned throughout the semester and will be posted to Blackboard.

Technology

- **Blackboard:** <https://bb.siue.edu>
 - All announcements and communication will be done through Blackboard. In addition, powerpoints, assignments, handouts, and everything will be posted here
- **Zoom:** <https://www.siue.edu/its/zoom/>
 - We use Zoom for online office hours, and/or in the even that we need to do any classes remotely. Use the link above and download the Zoom app (under Tips for Students).
- **SPSS:** This should be installed on the computers in the labs we'll use, but it can also be really useful to install on your own computer. Here is the link, but be sure to carefully follow the instructions as you only get one chance. You'll need to download the install file and the document with the license code.
<https://www.siue.edu/its/labsclassrooms/vlab/spss.shtml>
Note: SPSS can be installed on any Mac or Windows computer, but will NOT work on Chromebook laptops.
- **Microsoft Office:** I highly recommend downloading and installing, (*don't try to use the web version!*). <https://www.siue.edu/its/office365/install.shtml>
- **Qualtrics:** for survey data gathering <https://siue.qualtrics.com/>

Communicating with the instructor:

The most reliable way (and only way) to contact me is via e-mail. I respond to e-mails I receive during the week (M-F, 9-5 p.m.) within 24-48 hours. If you need to speak with me personally, I am easy to find during my office hours in my office. If you are unable to attend office hours due to a scheduling conflict, please contact me for an appointment. Both in the classroom and email, I expect that you will address me as Dr. Polk or Professor Polk.

E-Mail Guidelines:

E-mail is a wonderful tool when used properly. Please follow these simple guidelines when e-mailing me or a GA, so that we can identify which section you are in and address your concern without having to write you back to say “Who are you and what section are you in??” (This happens, *often!*)

1. Include class info in your subject line (PSY 221 Sec XXX). This is where your section number becomes especially important.
2. ALWAYS sign your e-mail. Many of you have e-mail addresses that mask your identity.
3. Please treat your e-mails as professional communications. Please use proper grammar, spelling, and punctuation.

Note: I reserve the right to NOT respond to emails that lack any of these guidelines and/or are questions that can be easily solved on your own.

Communicating with YOU:

I will send out many emails and announcements via Blackboard so it is your responsibility to check your SIUE email regularly, as well as Blackboard announcements.

Course Requirements and Policies

All assignments will be posted in Blackboard. The dates of each assignment can be found on Blackboard and in your course calendar at the end of your syllabus. It is your responsibility to make sure that all assignments are completed and turned in on time. Work turned in after the scheduled date and time is considered late work.

Submitting Work

All assignments will be submitted via Blackboard. No emailed assignments will be accepted. *Do not email me to ask for extensions. This class moves at an extremely fast pace and it is your job to keep up.*

Syllabus Quiz [5 points]: It is your responsibility to complete the syllabus quiz within the first week in order to be familiar with this syllabus.

CITI Training [5 points]: An online certification of research ethics training. You should have already completed this in 220 so this will be an easy assignment. Please upload your completion of CITI training to blackboard. Just like in 220, if this is not uploaded by the due date, you risk being dismissed from the course.

Lecture Worksheets [65 points]: At the beginning of each new lesson/chapter, you will be given a lecture worksheet. These worksheets will be physical copies that will be handed out to you in class. Worksheets will not be posted to blackboard. Thus, if you miss class the day a new worksheet is handed out, you will need to come by Dr. Polk's mailbox located in the main Psychology Suite to get that week's worksheet. To receive credit for these worksheets, I will collect your worksheets the following class when the lesson is completed. Typically, this will be on Monday's but if we need extra time on a lesson, I will extend the pickup until Wednesday. Regardless, this will give you at least a week to work on these worksheets. Make sure you keep your worksheets with you so that I can collect them. If you miss class the day I collect the worksheets, your worksheet will be counted late. They will be returned to you after they are graded. Worksheets have to be filled out by hand (cannot type in the answers).

There will be two parts to the worksheet. The first part will serve as an outline/study guide for the chapter. These will closely follow the lecture slides and give you a few extra practice problems for that chapter. It is up to you how much effort you want to put into this but the more effort you include, the easier studying for your exams will be (per previous student's reports). At the end of the worksheet will be a few questions to test your knowledge of the material from that week. You will be graded on these questions at the end. However, in order to receive full credit, you have to fill out the entire worksheet (not just the questions at the end).

Lab Worksheets [65 points]: Every Friday there will be lab sessions. Make sure you attend the lab section that you enrolled in. In each lab, there will be an assignment for you to complete during the lab. Most assignments will be turned in by the end of the lab but in some occurrences, your lab worksheet will be turned in the following week. In order to get access to the lab worksheet, you must be present in class.

Exams [165 points; midterm: 65 points; final 100 points]: You will have two exams in this course – one midterm and one final. Your exams will be taken in person during lab and finals week. You will be allowed to bring your notes with you, but they have to be physical copies of your notes. No digital technology will be allowed during the exam. If you need a calculator, you will have to bring a calculator different from your phone. You will have 50 minutes to complete your midterm and 90 minutes to complete your final exam. Exams will be taken in the classroom. Please note that your final exam will be **Cumulative**.

Group Research Project [100]: For the group project, you will be put into groups of about 4 students in your lab section. You will work with your group to design and conduct a survey study. Your project will be completed in stages with due dates throughout the 16-week course as you create an APA style paper. There will be 2 drafts (40 points), one final draft (50 points) and one final presentation (10 points). Drafts will be submitted on Blackboard, which uses Turnitin to detect plagiarism. For all of the different drafts and sections, you will write individually and receive your own individual score. There are more specific breakdowns and guidelines located in the group project folder on Blackboard.

Engagement [50 points]: Engagement will be graded on three different items: a self-assessment (10 points), Professor + GA evaluation (30), and your group's assessment (10). The sum of the three evaluations will be your engagement grade. Engagement will be graded throughout the semester, but will be finalized upon completion of your group project.

Attendance [45 points]: There will be mandatory attendance in this class. Attendance in this course means showing up to class no later than 10 minutes late and not leaving early unexcused. In addition, it means being physically present when we collect attendance which will happen within the first 10 minutes of class. If we collect attendance before the 10 minute mark, you risk not receiving attendance credit that day. We will meet for a total of 28 times in lecture and 15 times in lab. You are allowed 3 misses in lecture and 2 misses in lab before you are penalized. So if you are feeling sick, please stay home. If you are having a day you need to stay at home, stay home. You do not need to let me know. You will receive 1 point for each lecture class you attend and 1.5 points for each lab you attend. Your attendance score will be the total of these two attendance scores.

Course Policies

While using your laptops in class is allowed, please refrain from being on non-class related websites (e.g., Facebook, Twitter, Texting, Google chat, Amazon, etc.). Also, please take out headphones and earphones when in class. Phones should never be used in class. Such behaviors may result in me asking you to leave the classroom and will negatively affect your grade.

Missed classes

If you have to miss class, that is okay! Life happens. You are given misses for a reason. Unless in extreme circumstances (i.e., illness that is having you miss multiple classes) or an excused absence (i.e., official university excuse), you do not need to email me that you will be absent. If you feel the need to still email me that you will be missing, I will most likely not respond. If you miss class or lab, here is what you should do:

- Read over the slides that correspond to the lecture that week (they will be posted on blackboard)
- Make sure you pick up the worksheet that corresponds to the lecture that week. These can be found in my box in the main Psychology suite. Please note it will only have the current week's worksheet in the box. Should you need an older worksheet, please come to my office directly.
- If you miss the day or arrive late to class we turn in a lecture worksheet, your worksheet will be counted late. To avoid getting a larger late penalty, you need to drop off your worksheet in my OUTbox with the date and time of when you placed it in the box. Failure to include the date and time could result in a larger late penalty or no acceptance for the worksheet. Remember, anything more than 3 days will be counted as a 0. This includes weekends. If you know in advance you will be gone, you can email us a picture of the worksheet completed before class starts or drop it off in our box before class starts.
- NOTE: If you will miss lab when we are working on group assignments, please make sure you let your group members know. Part of being a good group member entails open communication.
- Get Help – come to office hours with Dr. Polk or the GA's if you have further questions.

Late assignments

Any assignment (except exams and your final week of assignments) can be submitted late with a penalty. Anything submitted 24 hours late will receive a 10% deduction, 48 hours late will receive a 20% deduction, 72 hours will receive a 30% deduction, and anything after 72 hours will receive a 0.

- If you are absent the day, we submit lecture worksheets and want to avoid the penalty, you can either turn it in early to my box OR send your GA an email with a timestamp picture that documents you have the assignment finished by class deadline. You will still need to get the document turned in in person to receive a grade. Failure to get it turned in within 5 days will result in a 0.
- When we get to the final week of the semester, no late assignments will be accepted.

Course Questions

It is natural for everyone to have questions and I want you to feel comfortable asking questions. That said, in some cases, students ask questions that could be easily answered by looking in the syllabus or course materials. In order to facilitate personal responsibility, I ask that you follow the "rule of 3 then me" before asking a question. If your question is about the course requirements or some aspect of the course check in 3 places for the answer before you ask me. When you ask me, tell me where you have looked for the answer and explain your question. This helps me understand the question so I can give you a better answer. If you do have a question, you can send me an email.

Academic integrity/plagiarism

Plagiarism is the use of another person's words or ideas without crediting that person. Plagiarism and cheating will not be tolerated and may lead to failure on an assignment, in the class, or dismissal from the University, per the SIUE academic dishonesty policy. Students are reminded that the expectations and academic standards outlined in the Student Academic Code (3C2) apply to all courses, field experiences and educational experiences at the University, regardless of modality or location. The full text of the policy can be found here:

<https://www.siu.edu/policies/3c2.shtml>.

Use of an AI Generator such as ChatGPT, iA Writer, MidJourney, DALL-E, etc. is **explicitly prohibited** unless otherwise noted by the instructor. The information derived from these tools is based on previously published materials. Therefore, using these tools without proper citation constitutes plagiarism. Additionally, be aware that the information derived from these tools is often inaccurate or incomplete. It's imperative that all work submitted should be your own. Any assignment that is found to have been plagiarized or to have used unauthorized AI tools may receive a zero and / or be reported for academic misconduct. By submitting assignments in this class, you pledge to affirm that they are your own work and you attribute use of any tools and sources.

Turnitin

This course will utilize the Turnitin plagiarism detection software. A Turnitin link will be available anywhere written work is to be submitted in the course. Find out more about using Turnitin.

Grading

<u>Assignment</u>	<u>Point Breakdown</u>
Syllabus Quiz	5
CITI Training	5
Lecture Worksheets	65
Lab Worksheets	65
Midterm Exam	65
Final Exam	100
Survey Project	100
Engagement	50
Attendance	45
Total	500

Final grades are not negotiable. If you are upset about a grade on an assignment, you need to set up a meeting with me to discuss that within a week of the published grade of the assignment. After that, I will not consider a grade dispute. ***I especially do not respond to end-of-semester e-mails that request unearned grade bumps.***

Department of Psychology Writing Policy

As a student in this course, you will be expected to display university-level writing, which includes completing course assignments that meet the following basic writing criteria. Specifically, all written assignments completed for this course should include:

- clear transitions from sentence to sentence and idea to idea (e.g., paper is organized/flows well);
- verb tense consistency;
- clear and unambiguous sentences and ideas;
- writing that is free of typos, spelling errors, and major grammatical errors;
- properly formatted paper including headings, citations and references, per the 7th edition of the APA manual.

This is by no means an exhaustive list of basic writing skills, but will give you an idea of what we are looking for in our papers. If you feel you need help with your writing, you are encouraged to seek assistance from the writing center on campus (<http://www.siue.edu/is/writing>) or utilize one of the many online resources they have identified to help students (<http://www.siue.edu/lss/writing/resources.shtml>).

If your graded written assignments fail to meet the basic writing requirements listed above (and any others found to be appropriate by your instructor), the instructor will stop the grading process and return the paper to you (see below for the specific policy for this class).

- **The penalty for unacceptable writing in this class is as follows: If more than three writing errors are found on any one page of a written assignment, grading will cease, and the student's paper will be returned with a grade equal to 50% of the total point value for the assignment.**

University Policies

Services for Students Needing Accommodations

Students needing accommodations because of medical diagnosis or major life impairment will need to register with Accessible Campus Community & Equitable Student Support (ACCESS) and complete an intake process before accommodations will be given. Students who believe they have a diagnosis, but do not have documentation, should contact ACCESS for assistance and/or appropriate referral. The ACCESS office is located in the Student Success Center, Room 1203. You can also reach the office by emailing us at myaccess@siue.edu or by calling 618-650-3726. If you feel you would need additional help in the event of an emergency situation, please notify your instructor to be shown the evacuation route and discuss specific needs for assistance. ***It is your responsibility to communicate with me ahead of time of what accommodations you need. Just sending me an ACCESS letter is not sufficient, you have to communicate it with me.***

Diversity and Inclusion

SIUE is committed to respecting everyone's dignity at all times. In order to learn, exchange ideas, and support one another, our virtual and physical classrooms must be places where students and teachers feel safe and supported. Systems of oppression permeate our institutions and our classrooms. All students and faculty have the responsibility to co-create a classroom that

affirms inclusion, equity, and social justice, where racism, sexism, classism, ableism, heterosexism, xenophobia, and other social pathologies are not tolerated. Violations of this policy will be enforced in line with the SIUE Student Conduct Code.

The Center for Student Diversity & Inclusion <https://www.siu.edu/csdi> is an excellent resource for students for support and community. Any person who believes they have experienced or witnessed discrimination or harassment can contact Ms. Jamie Ball, Director in the Office of Equal Opportunity, Access and Title IX Coordination at (618) 650-2333 or jball@siue.edu. There is also an online form for reporting bias incidents at https://cm.maxient.com/reportingform.php?SIUEdwardsville&layout_id=10.

Additional Support

Academic and Other Student Services

As an enrolled SIUE student, you have a variety of support available to you, including:

- [Lovejoy Library Resources](#)
- [The Writing Center](#)
- [Academic Advising](#)
- [Campus Events](#)
- [Counseling Services](#)

If you find that you need additional support, please reach out to me and let me know.

Cougar Care

Dealing with the fast-paced life of a college student can be challenging, and I always support a student's decisions to prioritize mental health. Students have access to counseling services on campus (Student Success Center, 0222). Make an appointment by visiting cougarcare.siu.edu or by calling 618-650-2842.

General Health Measures

Mental Health Resources: SIUE is now partnered with [TimelyCare](#) to deliver a new virtual health and well-being platform for students. Through either a mobile app or your desktop, TimelyCare provides 24/7 access to virtual care from anywhere in the United States at no cost. Visit timelycare.com/SIU or download the TimelyCare app from your app store and register with your school email address. You can then start visits from any web-enabled device – smartphone, tablet, laptop, or desktop – anywhere in the United States.

What services are available?

- TalkNow - 24/7, on-demand emotional support.
- Scheduled Counseling - Select the day, time, and mental health provider of your choice. (9 visits per year)
- Health Coaching - Support for developing healthy behaviors.
- Basic Needs Support - Get connected to low or reduced-cost community resources.
- Self-Care Content - Yoga and meditation sessions and group conversations with our providers on a variety of health and well-being topics.

Recordings of Class Content

Faculty recordings of lectures and/or other course materials are meant to facilitate student learning and to help facilitate a student catching up who has missed class due to illness or quarantine. As such, students are reminded that the recording, as well as replicating or sharing of any course content and/or course materials without the express permission of the instructor of record, is not permitted, and may be considered a violation of the University's Student Conduct Code (3C1), linked here: <https://www.siue.edu/policies/3c1.shtml>.

Potential for Changes in Course Schedule or Modality There remains a possibility that planned classroom activities will need to be adjusted. Depending on circumstances and following state-issued recommendations, potential changes include alterations to distancing requirements, course modality (e.g., transition from face-to-face to online, hybrid, or hy-flex, mask wearing, in-course activities, etc). These changes would be implemented to ensure the successful completion of the course while preserving health and safety. In these cases, students may be provided with an addendum to the class syllabus that will supersede the original version. If the course schedule or modifications significantly alter expectations, a new syllabus will be issued.

Week/Date	Topic	Reading	Assignments Due by 11:59 p.m. Sunday
Week 1: 8/18 & 8/20	Syllabus/220 Review	Syllabus, 220 Materials	
<i>Fri 8/22 - Lab</i>	<i>Group Project Review + Syllabus Quiz</i>		
Week 2: 8/25 & 8/27	220 Review		
<i>Fri 8/29 - Lab</i>	<i>Group Assignments/ Choose Construct / Lit Review</i>		
Week 3: 9/1 & 9/3	No Class 9/1 (Labor Day) 220 Review		
<i>Fri 9/5 - Lab</i>	<i>Lit Review + Annotate</i>		<i>Ethics certification due (CITI Training)</i>
Week 4: 9/8 & 9/10	Experimental Design	R.M. Ch. 7	
<i>Fri 9/12 - Lab</i>	<i>Article Summary</i>		
Week 5: 9/15 & 9/17	Sampling Distribution	Stats Ch. 7	
<i>Fri 9/19 - Lab</i>	<i>Article Summary</i>		
Week 6: 9/22 & 9/24	Hypothesis Testing	Stats Ch. 8	
<i>Fri 9/26 - Lab</i>	<i>Construct Creation v1</i>		
Week 7: 9/29 & 10/1	T-Test	Stats Ch. 9	
<i>Fri 10/3 - Lab</i>	<i>Construct Creation v2 / Qualtrics</i>		<i>Qualtrics link sent to Dr. Polk by Friday at 11:59 p.m.</i>
Week 8: 10/6 & 10/8	Catch up / Review	R.M. Ch. 8	
<i>Fri 10/10 - Lab</i>	MIDTERM EXAM		
Week 9: 10/13 & 10/15	Between Subjects Design	Stats Ch. 10	
<i>Fri 10/17 - Lab</i>	<i>Intro to SPSS / Writing Day</i>		<i>Draft #1 Intro + Method</i>
Week 10: 10/20&10/22	Between Subjects T-Test	R.M. Ch. 9	
<i>Fri 10/24 - Lab</i>	<i>SPSS Practice – B/T</i>		
Week 11:10/27& 10/29	Within Subjects Design	Stats Ch. 11	
<i>Fri 10/31 - Lab</i>	<i>SPSS Practice - W/In</i>		
Week 12: 11/3 & 11/5	Within Subjects T-test		
<i>Fri 11/7 - Lab</i>	<i>Interpreting Data</i>		
Week 13: 11/10&11/12	ANOVA DESIGN/ ANOVA	R.M. Ch.11/ Stats Ch. 12	
<i>Fri 11/14 - Lab</i>	<i>Writing Day</i>		<i>Draft #2 Results + Discussion</i>
Week 14: 11/17 & 11/19	Regression	Stats Ch. 14	
<i>Fri 11/21 - Lab</i>	<i>Preparing for Project</i>		
11/24 – 11/26	Thanksgiving Break – No Class		
Week 15: 12/1 & 12/3	Review & Study		
<i>Fri 12/6- Lab</i>	<i>Project Presentations</i>		<i>Final Paper – due by 11:59 p.m. on Friday</i>
Week 16 FINALS WEEK	Final Exam		

Subject to change notice: All material, assignments, and deadlines are subject to change with prior notice. It is your responsibility to stay in touch with your instructor, review the course site regularly, or communicate with other students, to adjust as needed if assignments or due dates change.