

Research Design and Statistics I

PSYC 220-001 & 002 Fall 2026

Instructor	Dr. Carlee Beth Hawkins	Email	carhawk@siue.edu
Office	AH 0132	Class Info	MW 11-11:50 AH0401
Office Hours	Mon & Wed 12-12:30 & 2:45-3:00	001 Lab Info	Fri 11-11:50 FH0303
Sign-up link	https://tinyurl.com/carhawkoofficehours	002 Lab Info	Fri 12-12:50 FH0303
Class TA	Alayna Lammert	Office Hours	Mon & Wed 10-11am
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Lab GA	Alexandria (Lexie) Wallach	Lab GA	Isaac Compton
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Office Hours		Office Hours	
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Course Description

Psychology is a science. PSYC220 and PSYC221 introduce students to the common research designs and statistics used in psychology. PSYC220 focuses on nonexperimental research designs and descriptive statistics. PSYC221 focuses on experimental research designs and inferential statistics. These classes teach you to critically engage with research in all areas of psychology and develop your understanding and comfort with science and statistics. **Prerequisite: C or better in PSYC 111**

Course Objectives

In this course, students will learn to:

- Understand nonexperimental research designs and their appropriate statistical analyses
- Compute descriptive statistics by hand and use SPSS (statistics software) to analyze data
- Critically read and summarize psychology research articles
- Conduct literature searches using PsycINFO
- Design and conduct survey studies
- Write research reports in APA style
- Present research findings in a group format

Course Structure

- “Class” will be held every Mon and Wed from 11-11:50am in person in AH0302
- “Lab” is on Fridays in person
 - Section 001 will be 11-11:50am in FH3103
 - Section 002 will be 12-12:50pm in FH3103

Required Materials

Research Methods textbook: Gravetter, F. J. & Forzano, L. B. (2019). *Research methods for the behavioral sciences* (6th ed.). Belmont, CA: Cengage

Statistics textbook: Gravetter, F. J., Wallnau, L. B., Forzano, L. B., & Witnauer, J. E. (2021). *Essentials of statistics for the behavioral sciences* (10th ed.). Belmont, CA: Cengage.

SPSS software: Version 31 <https://www.siue.edu/its/labsclassrooms/vlab/spss.shtml>

Calculator: Simple calculator, any kind (not your phone or a graphing calculator)

Printer: Access to a printer for approximately 60-80 pages of printing (\$9-12 on campus)

Course Requirements and Grading (how you will be graded)

<u>Assessment</u>	<u>Point Total</u>	<u>Percent</u>	<u>Grade Breakdown</u>
2 Exams (15 and 20pts)	35 pts	35%	90% – 100% = A
4 Study Guides (2.5pts each)	10 pts	10%	80% – 89% = B
Lab project	45 pts	45%	70% – 79% = C
Attendance and Engagement	10 pts	10%	60% – 69% = D
Total points	100 pts	100%	below 60% = F

- **Exams [35 points].** Two exams are worth 15 and 20 points respectively. Exams are completed in class and you may use your books and approved hand-written study guides. Exams will be multiple choice with a writing portion. Exam 2 will be cumulative.
 - **Missed exams.** If you miss an exam, request a make-up by email right away.
- **Study guides [10 points; 4SGs*2.5pts].** SGs are provided weekly and graded monthly. SGs will help you keep quality notes, get feedback on your notes, and study for exams. Accepted sources to find answers to study guide questions are your textbook, lecture slides and discussion, and the syllabus. Google and genAI are not approved sources. Sources that are not cited will be subject to penalty outlined in the Academic Honesty policy.
- **Lab project [45 points].** You will complete a correlational study that requires you to create a hypothesis, read research papers, design a survey, collect and analyze data, and understand results. This allows you to learn by *doing* rather than just listening and reading. Lab assignments (LAs) build to two APA-style papers and a group poster presentation.
 - **Lab Assignments [15pts; 6 LAs*2.5pts].** We will work on lab assignments (LAs) and papers in lab each week. LAs must be submitted in person and hand-written. They will also include print-out attachments, such as research articles or SPSS output.
 - **Papers [20pts; 2 Papers*10pts].** Two papers will be typed in a shared Microsoft Word document in OneDrive and submitted to Turnitin on Blackboard.
 - **Poster Presentation [10pts].** Groups will work together to create a poster and present their poster in lab. Students will evaluate their group members' participation throughout the semester, which will inform the poster presentation grade.
- **Attendance and Engagement [10 points].** Attendance will be collected every day in person. Full points are awarded for 80-100% attendance with engagement. With 44 total classes, you can miss up to 9 classes without penalty. Starting with the 10th missed class, you will lose 1 point for each missed class. Attendance without engagement and tardiness of 10 minutes or more will be counted as an absence.
 - **Missed classes.** It is not necessary to email me if you miss a class or two. Follow the Missed Classes and Late Submissions policy and return to class when you are able.
 - If you miss more than two classes in a row, please email me your status in class.

How to Do Well and Stress Less in This Course (some advice)

- **Understand course expectations** – review syllabus weekly, keep a planner/calendar
- **Complete class material** – read textbook, engage in class, take notes, study
- **Attend and get help** – attend class and lab, communicate with lab team, professor, TAs
- **Submit assignments** – keep track of assignments; deadlines Wednesdays or Fridays at 2pm

Course Calendar (what we are doing and what is due)

Date	Topic	Reading	Assignment due Wed or Fri 2pm	Points
Week 1	Science & research	M-Ch1		
8/28 Lab 1	PsycINFO and lit searches			
Week 2	Hypothesize & operationalize	M-Ch2&3		
9/4 Lab 2	Understanding research articles		LA#1	2.5
Week 3	Methods in psychology	M-Ch6		
9/11 Lab 3	Article summaries & plagiarism			
Week 4	Descriptive designs	M-Ch13	SG#1: Weeks 1-4	2.5
9/18 Lab 4	Group article discussion		LA#2	2.5
Week 5	Surveys	M-Ch13		
9/25 Lab 5	Writing workshop – Intros			
Week 6	Sampling	M-Ch5		
10/2 Lab 6	Developing surveys		LA#3	2.5
Week 7	Ethics	M-Ch4	SG#2: Weeks 5-7	2.5
10/9 Lab 7	Writing Design & Materials			
Week 8	Review and Exam 1		Exam #1	15
10/16 Lab 8	SPSS – Basics and samples		Paper #1	10
Week 9	Frequency & central tendency	S-Ch1-3		
10/23 Lab 9	Writing workshop – Method		LA#4	2.5
Week 10	Variability	S-Ch4		
10/30 Lab 10	SPSS – Descriptives		LA#5	2.5
Week 11	Correlation	S-Ch14	SG#3: Weeks 9-11	2.5
11/6 Lab 11	SPSS – Correlations & Figures		LA#6	2.5
Week 12	Catch-up and review			
11/13 Lab 12	Writing workshop			
Week 13	Z-scores & probability	S-Ch5&6		
11/20 Lab 13	Group posters		Paper #2	10
Week 14	Thanksgiving – NO CLASS			
11/27 Lab 14	Thanksgiving – NO LAB			
11/24-11/28	Z-scores & probability			
12/4 Lab	Group posters			
Week 15	Regression	S-Ch14	SG#4: Weeks 12-14	2.5
12/11 Lab 15	Group poster presentation		Poster Presentation	10
12/14 10AM	Exam 2 Mon Dec. 14th 10am		Exam #2	20

Missed Classes, Late Submissions, and Incomplete Work

- **Make up the missed material.** Read the textbook, review slides on BB, get notes from a classmate. If you have any questions, come to office hours or email your TAs.
- **Complete missed work.** Study guides and lab assignments will be provided in hard copy only for pick up in the box outside my office or attend my or the TAs' office hours.

- **Attendance points.** You will not receive attendance points for missing class, because you can miss up to 9 class periods without penalty.
- **Late submissions.** Any assignment (other than exams) can be submitted up to five days late with a 20% late penalty. After the five-day window, all work will receive a zero. It is ALWAYS better to submit an assignment late than to receive a zero.
- **Timestamp.** If you miss class the day of a deadline (Wed and Fri), take a picture and email it to your TA as a timestamp, and then get the hard copy turned in to your TA within five days of the deadline. Late work without a timestamp gets a late penalty.
- **Incomplete work.** If you are missing required elements of your LAs (e.g., research articles or SPSS output), I will allow 5 days to submit the missing elements with a 20% late penalty. After the 5-day window, work with missing required elements receives a 0.

Course Policies and Expectations (what we can expect of each other)

- **Paper copies of SGs and LAs.** If you miss class or misplace your SG or LA, copies are available in the box outside my office, or from the TAs or myself in office hours.
- **Check your SIUE email BEFORE class.** In case of illness or childcare issues, I may need to move class online. Please check your email before leaving home for class.
- **Illness policy.** If you have any illness symptoms that cannot be explained by a chronic condition you have, PLEASE stay home. Make up the work when you feel better. If you miss on a day we submit our work, follow the missed class policy to submit your work.
- **Emailing me.** I can help you much better in person than by email. Stop by my office, see me after class, or email your TAs. Please email me only if you have a significant ongoing issue or emergency and cannot get help in person.
- **Grades.** Student grades will be posted regularly on Blackboard. If you believe there is a discrepancy in the grade posted and the grade you received on an assignment, it is your responsibility to provide me with the graded assignment to justify any grade changes.
- **Extra credit.** Extra credit will be offered to the entire class, and not to individual students. Please do not ask for extra credit at the end of the semester to improve your grade.
- **Onedrive.** We will create a shared Microsoft Word document on Onedrive where you will develop your papers over the course of the semester in lab.
- **Turn It In.** We will grade and provide feedback on the shared Word doc on Onedrive. However, we will submit drafts and the final paper through Turnitin to receive a timestamp (indicating you're ready for your paper to be graded) and to check similarity. Do not worry about APA formatting in Turnitin, as we will be grading the shared Onedrive doc.
- **Academic honesty.** Academic dishonesty occurs through plagiarism, prohibited genAI use, and prohibited help. First offenses will receive a warning and learning plan unless they are egregious. A second offense will receive an F on the assignment and will be reported to the Provost's office. A repeat offense will result in failing the class and additional reporting.
 - **Plagiarism.** Do not plagiarize. See department policy below.
 - **genAI.** Zero tolerance approach to generative AI. In this course, the use of generative artificial intelligence (GenAI) tools is not permitted for coursework. The purpose of this policy is to ensure that all submitted work reflects your own thinking, skill development, and academic voice. You are expected to engage directly with course materials and complete all assignments independently, without assistance from AI tools for generating, revising, or editing content. Using GenAI to produce, modify, or meaningfully contribute to submitted work—whether for writing, problem solving, or analysis—violates the SIUE academic integrity expectations of this course. If you are

uncertain whether a tool or practice counts as GenAI use, you should assume it is not allowed and seek clarification before submitting your work.

- **Giving and receiving help.** You are encouraged to brainstorm research ideas or discuss your project with classmates. However, your work should be your own.

Psychology Department Policies

- **Psychology Department policy on plagiarism.** Plagiarism includes presenting someone else's words without quotation marks (even if you cite the source), presenting someone else's ideas without citing that source, or presenting one's own previous work as though it were new. When paraphrasing from another source or your own work, at the very least, the student should change the wording, sentence syntax, and order of ideas presented in the paper. Additionally, you should not submit a paper, or parts of a paper, written to fulfill the requirements of one class for the requirements in another class without prior approval of the current instructor and appropriate citation. Ideally, the student will integrate ideas from multiple sources while providing critical commentary on the topic in a way that clearly identifies whether words and ideas are those of the student or are from another source. Plagiarism is one type of academic misconduct described in SIUE's Student Academic Code (<http://www.siu.edu/policies/3c2.shtml>). University policy states that "Normally a student who plagiarizes shall receive a grade of F in the course in which the act occurs. The offense shall also be reported to the Provost." (<http://www.siu.edu/policies/1i6.shtml>). The University policy discusses additional academic sanctions including suspension and expulsion from the University. To insure that you understand how to avoid plagiarism, we encourage you to review the information on plagiarism provided on the Department of Psychology web page at <http://www.siu.edu/education/psychology/plagiarism.shtml>.
 - We will cover how to properly read and cite sources in class. You are responsible for understanding what plagiarism is; if you have any questions at all, you should discuss them with Dr. Hawkins BEFORE you turn in a plagiarized paper. A lack of knowledge of appropriate citation and referencing format will not excuse you from point deductions from written assignments or disciplinary action in the case of plagiarism.
- **Psychology Department policy on Incomplete Grades, Pass-No Credit Option, and Withdrawal.** It is the student's responsibility to officially withdraw from a course through the Enrollment Office by the dates set by the university if the student is not intending to complete the course. Students who do not withdraw and have not completed the course will receive an Unauthorized Withdrawal (UW). Only under special circumstances may a faculty member agree to give the student an Incomplete (INC) grade in order to allow the student to complete the remaining work for the course no later than the end of the following semester. An INC is never automatic but must be approved by the instructor. If an instructor agrees to give a student an INC grade, the instructor and student will fill out a form (Memorandum of Incomplete Grade) indicating why an INC is being given. One copy of the completed form will be given to the student, one copy will be given to the instructor, and one copy will be kept by the Department of Psychology secretary. If the work is not completed by the specified time, the grade will be changed from INC to F.
- **Psychology Department 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 citations and references (if relevant).

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/is/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 with the grade of 0. You will have 48 hours to return the assignment in an acceptable form; if it still fails to meet the basic writing criteria, the grade of 0 will remain.

Student Services (where you can go if you need some help)

- [Lovejoy Library Resources](#)
- [Tutoring Resource Center](#)
- [The Writing Center](#)
- [Dean of Students](#)
- [Financial Aid](#)
- [Counseling Services](#)
- [Cougar Cupboard \(food pantry\)](#)
- [ITS \(tech and Blackboard help\)](#)
- [SIUE Housing](#)

University Policies

- **SIUE Statement on disabilities.** 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. The ACCESS office is located in the Student Success Center, Room 1270. You can also reach the office by e-mail at myaccess@siue.edu or by calling 618.650.3726. For more information on policies, procedures, or necessary forms, please visit the ACCESS website at www.siue.edu/access.
- **SIUE statement on diversity.** 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 [Inclusive Excellence, Education, and Development Hub](#) is an excellent resource for students for support and community. Any person who believes they have experienced or witnessed discrimination or harassment can contact Lindy Wagner, Assistant Vice Chancellor for Inclusive Excellence, Education and Development at (618) 650-3179 or linwagn@siue.edu.

- **Pregnancy and newly parenting policy.** This policy and procedure are established to ensure the protection and equal treatment of pregnant students, students with pregnancy-related medical conditions including as a result of the termination of pregnancy, and students who become new parents including parents adopting or fostering to adopt for the first 12 weeks a child is in the home, in accordance with Federal and State guidelines and regulations. "New Parents" refers to a parent who has recently welcomed a newborn or adopted a child or is fostering to adopt a child and needs support to mitigate the disruption in academic progress within the first 12 weeks of parenting or a parent that needs support due to medical necessity attributed to pregnancy or delivery of a child; care of newborn; or lactation within the first year of child's life or legal adoption/fostering. Visit [Policies & Procedures - Student Rights and Conduct - Newly Parenting Policy - 3C15](#) to view the full policy and learn how to request accommodations through the Office of Equal Opportunity, Access, and Title IX Coordination (EOA).
- **SIUE nondiscrimination policy.** Southern Illinois University Edwardsville (SIUE) is a public comprehensive University committed to creating and maintaining a diverse community in which students, faculty, and staff can learn and work together in an environment free of discrimination and free from any form of illegal harassment. Such actions violate the dignity of the individual and the integrity of the University as an institution of learning. SIUE prohibits discrimination against employees, applicants for employment and students on the basis of age, color, disability, marital status, national origin, race, religion, sex, sexual orientation, or veteran's status. Discrimination in any form will not be tolerated; management and supervisory personnel, at all levels, are responsible for taking reasonable and necessary action to prevent discrimination.

Academic Integrity

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.siue.edu/policies/3c2.shtml>.

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>.