Research Design and Statistics I
PSYC 220-001 & 002 Fall 2025

Instructor	Dr. Carlee Beth Hawkins	Email	carhawk@siue.edu
Office	AH 0132	Class Info	MW 11-11:50 AH0302
Office Hours	Mon & Wed 11:50-12:30 Tues & Thurs 12:15-12:45	001 Lab Time 002 Lab Time	Fri 11-11:50 FH3103 Fri 12-12:50 FH3103

Class TA	Macie Hutchison	Office Hours	Mon & Wed 1-2pm
Email	machutc@siue.edu	Office	AH0300

Lab GTA	Payton Bowling	Lab GTA	Charlotte Prior
Office	AH0300	Office	AH0300
Office Hours	Fri 1-2pm	Office Hours	Fri 10-11am
Email	pabowli@siue.edu	Email	cprior@siue.edu

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
- Design and conduct survey studies and write research reports in APA style

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., Wallnau, L. B., Forzano, L. B., & Witnauer, J. E. (2018). *Essentials of statistics for the behavioral sciences* (9th ed.). Cengage.
Statistics textbook: Gravetter, F. J. & Forzano, L. B. (2018). *Research methods for the behavioral sciences* (6th ed.). Belmont, CA: Cengage.
SPSS software: Version 29 https://www.siue.edu/its/labsclassrooms/vlab/spss.shtml
Calculator: Simple calculator, any kind (not your phone or a graphing calculator)

How to Do Well and Stress Less in This Course (some advice)
- **Understand course expectations** – read syllabus, ask questions, keep a planner/calendar
- **Complete class material** – read textbook, pay attention 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 Requirements and Grading (how you will be graded)

Assessment	Point Total	Percent	Grade Breakdown
2 Exams (12 and 18pts)	30 pts	30%	90% – 100% = A
4 Study Guides (2.5pts each)	10 pts	10%	80% – 89% = B
Lab project	40 pts	40%	70% – 79% = C
Attendance and Engagement	20 pts	20%	60% – 69% = D
Total points	**100 pts**	**100%**	below 60% = F

- **Exams [30 points]**. Two exams are worth 12 and 18 points respectively. Exams are completed in class and you may use your books and approved hand-written study guides. Exam 1 will be multiple choice. Exam 2 will include a cumulative and a writing portion.
    - **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.
- **Lab project [40 points]**. You will complete an experiment that requires you to create a hypothesis, read research papers, design an experiment, collect and analyze data, and understand results. This allows you to learn by *doing* rather than just listening and reading. Three lab assignments (LAs) and three drafts build up to a final APA-style paper.
    - **Lab Assignments [15pts; 3 LAs*5pts]**. We will work on lab assignments and paper drafts in lab each week. LAs must be submitted in person and hand-written.
    - **Drafts [15pts; 3 Drafts*5pts].** Three drafts will be typed in a shared Microsoft Word document stored in OneDrive and submitted before the deadline through Turnitin.
    - **Final Paper and Presentation [10pts]**. You will revise your drafts and print an APA-style paper to present in the last lab. Additional details provided in class.
- **Attendance [10 points]**. Attendance will be collected every day in person. Full points are awarded for 80-100% attendance. With 44 total classes, you can miss up to 9 classes without penalty. Starting with the 10th missed class, you will lose 0.5 point for each missed class.
    - **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. **Note**: If you miss class regularly and fall behind, email me as soon as possible.
- **Engagement [10 points]**. I will request an evaluation of your engagement from you (self-reflection), the TAs, and your lab project group members to inform your grade.

Missed Classes and Late Submissions (what to do when you miss class or deadlines)
- **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.
- **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.
- **Submit!** It is ALWAYS better to submit an assignment late than to receive a zero.

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		
8/22 Lab 1	Intro to survey project		Onedrive shared	--
Week 2	Hypothesize & operationalize	M-Ch2&3		
8/29 Lab 2	Article discussion		CITI certificate on file	--
Week 3	**NO CLASS Monday 9/1** Methods in psychology	M-Ch6		
9/5 Lab 3	Understanding research articles		**LA#1:** Study design	5
Week 4	Methods in psychology	M-Ch6	**SG#1:** Weeks 1-4	2.5
9/12 Lab 4	Finding research articles			
Week 5	Descriptive designs	M-Ch13		
9/19 Lab 5	Writing Introductions		**LA#2:** Intro outline	5
Week 6	Surveys and sampling	M-Ch5		
9/26 Lab 6	Developing surveys			
Week 7	**ONLINE Monday 9/29** Ethics and plagiarism	M-Ch4	**SG#2**: Weeks 5-7	2.5
10/3 Lab 7	Writing Method sections		**Draft#1**: Introduction	5
Week 8	Review and **Exam 1 Wed 10/8**	--	**Exam #1**	12
10/10 Lab 8	Finalize surveys			
Week 9	Frequency & central tendency	S-Ch1-3		
10/17 Lab 9	Analyzing Data			
Week 10	Variability	S-Ch4		
10/24 Lab 10	Analyzing Data		**Draft#2**:Intro&Method	5
Week 11	Correlation	S-Ch14	**SG#3:** Weeks 9-11	2.5
10/31 Lab 11	Analyzing Data			
Week 12	Catch-up and review	--		
11/7 Lab 12	Writing Results & Discussions		**LA#3:** Data worksheet	5
Week 13	Z-scores & probability	S-Ch5&6		
11/14 Lab 13	Abstracts, Tables, Figures		**Draft #3**: I&M, R&D	5
Week 14	Z-scores & probability	--	**SG#4:** Weeks 12-14	2.5
11/21 Lab 14	Finalizing papers			
11/24-11/28	**Thanksgiving – NO CLASS**	--		
11/28 Lab	**Thanksgiving – NO LAB**	--		
Week 15	Revise paper & study	--		
12/5 Lab 15	Final paper and presentation	--	**Final Paper & Present**	10
12/10 10AM	**Exam 2 Wed Dec. 10th 10am**	--	**Exam #2**	18

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

- **Paper copies of SGs and LAs**. If you miss class or misplace your LA or SG, 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, exposure, and 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.
- **Open door**. My office is AH0132. If my door is open, you're welcome to drop in for help.
- **Emailing me**. Please only email me in an emergency. 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 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 OneDrive folder that contains relevant documents for your lab project (such as annotated articles), as well as a shared Microsoft Word document where you will develop your final paper over the course of the semester in lab.
- **Turn It In.** We will grade and provide feedback on the shared Word doc in the Onedrive folder. 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.** This is a level-0 genAI class, meaning that genAI use is not allowed and "students will create their own, original work without the use of GenAI for any manner." (see https://prodev.illinoisstate.edu/ai/usage/ to review genAI levels). For this class, the use of artificial intelligence (AI) applications (including ChatGPT, DALL-E, and others) to produce content for course assignments and assessments is a violation of SIUE's academic policy and is prohibited.
  - **Giving and receiving help.** You are encouraged to brainstorm research ideas or discuss your project with classmates. However, your work should be your own.

University and 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.siue.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.siue.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.siue.edu/education/psychology/plagiarism.shtml..

- o 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.

- **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.** All societies and peoples have contributed to the rich mix of contemporary humanity. In order to achieve domestic and international peace, social justice, and the development of full human potential, we must build on this diversity. SIUE nurtures an open, harmonious, and hospitable climate that facilitates learning and work. Each member of the University is responsible for contributing to such a campus environment.
- **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.
- **University Guidance on Artificial Intelligence.** Unless expressly allowed by the instructor, the use of artificial intelligence (AI) tools and applications (including ChatGPT, DALL-E, and others) to produce content for course assignments and assessments is a violation of SIUE's academic policy and is prohibited.

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

• Lovejoy Library Resources	• Financial Aid
• Tutoring Resource Center	• Counseling Services
• The Writing Center	• Cougar Cupboard (food pantry)
• Academic Advising	• ITS (tech and Blackboard help)
• Dean of Students	• SIUE Housing