

# RESEARCH DESIGN & STATISTICS I

PSY-220-005, 006

Fall 2025

"PSYCHOLOGICAL SCIENCE IS THE ANTIDOTE TO THE PITFALLS OF UNAIDED INTUITION" (MYERS, 1997; PP. 111)

#### **ABOUT THE INSTRUCTOR**

Name: Dr. Ashley Abraham Email: ashabra@siue.edu

Office Hours: M: 3 - 4PM, W: 11AM - 12PM

## ABOUT THE GRADUATE TAS

Name: Jessica Stroup Email: jestrou@siue.edu Office Hours: TBD Name: Nicholas Young Email: nichyou@siue.edu

Office Hours: TBD

## Required Textbooks

Gravetter, F. J. & Forzano, L. B. (2018). Research methods for the behavioral sciences (6th ed.). Belmont, CA: Cengage.

Gravetter, F. J., Wallnau, L. B., Forzano, L. B., & Witnauer, J. E. (2018). *Essentials of statistics for the behavioral sciences* (10th ed.). Cengage.

## Required Software/Tools

Access to R and R Studio and/or Posit Cloud is required for statistical analyses. More information about R, RStudio and Posit Cloud is available in the Course Tools section of the syllabus.

Note: R is a free, open-source program. Mac users may need to install additional programs to use R Markdown locally

## WELCOME TO RESEARCH DESIGN AND STATISTICS!

## Course Overview

TL/DR: You will learn how to do science! And to think critically about research!

Have you ever heard that "absence makes the heart grow fonder?" Maybe you've heard "Out of sight-out of mind." Both sayings seem true intuitively, and probably we've all said both at some point in the past, with varying degrees of conviction...so which saying is correct?

People rarely recognize that we often act on intuition, folk-wisdom, proverbs, and sayings—even if we are totally wrong! If so many people base decisions on advice that is contradictory or even flat out wrong, how can you know what to trust, particularly when it comes to human behavior? The answer is...psychological science!

Psychology is the science of mind and behavior. Science is a way of knowing. In Research Design and Statistics, you will learn how psychological science is done. The main purpose of this course is to help you learn to think like a psychological researcher. This means, by the end Research Design and Statistics, you will have the tools necessary to become critical consumers AND generators of the research information found throughout all other psychological courses. To accomplish this purpose, students will be exposed to the philosophy of science, methods for designing research, strategies for making sense of data (e.g., statistics), guidelines for presenting results, and ethical constraints that we all must abide by as members of the psychological community. You will be able to:

- read, understand, and critically evaluate published research
- generate empirically testable hypotheses
- design a research study and collect data
- select and calculate appropriate statistics
- understand the major concepts of statistics
- analyze and interpret data
- effectively communicate research results to your peers
- write a research paper in APA style

## A word to the wise...

Research Design and Statistics is a critical course for psychology majors, and it is at the heart of psychological science.

It is NOT intuitive, and not something you can learn last minute.

The number one reason students don't pass this class is falling behind and not turning everything in. But if you stay on top of everything each week, put in the time and effort, and take advantage of help from me and our graduate teaching assistants, you

## can do this 😊!

# What about the statistics part?

The mere mention of the word "statistics" makes many students feel anything from slightly overwhelmed to extreme dread. This is very normal. Statistics is just a way to make numbers meaningful. Do. Not. Panic. I believe you can succeed in this course, even if you feel apprehensive about statistics in the beginning. For me to help you succeed, it is important that you ask questions or seek

<u>help</u> whenever something does not make sense. I am not omniscient, but I am compassionate. I will help you to understand the material, provided you let me know when something is not clear. I expect you to have questions about this stuff; it would be atypical not to have questions.

Asking questions is a sign of curiosity and desire to learn so please ask questions! Your TA and I are here to help!

## Special notes about PSYC 220/221

- If you need to remain a full-time student (e.g., for financial aid), you should be registered for at least 15 credit hours this semester. Why? In the unfortunate event that you fail this course (PSYC220), you will be dropped from PSYC221, which will reduce your credit hours. Thus, you should have 15 hours in order to be able to drop PSYC221 and still remain at full-time status (12 hours).
- 2. This course has a "2 attempt" rule—you may only attempt the course (including W, WF, WP) two times. After two unsuccessful attempts, you will be dropped from the major.
- 3. A grade of C or better in PSYC220 is required to progress to PSYC221. If you earn a course grade of D or F in PSYC220, contact your academic advisor immediately to determine whether there is any possibility of getting enrolled in a section of this course next semester.

## Communicating with the instructor(s)

Please address me as Dr. Abraham, Professor Abraham, or Prof. Abraham. If you have questions, the best way to get in touch with me is MS Teams. Please post in the "Help Me!" channel unless your question is personal or very specific to you, in which case you can direct message me on Teams. Email is also an option, but I get bombarded by email everyday so I'm more likely to miss an email. I will do my best to respond within 48 hours on weekdays.

#### 30-minute Rule

The 30-minute rule is to remind you to attempt to solve course related problems on your own, before reaching out to the instructor, TAs or even fellow classmates. Whatever the issue – can't find something on BB, something not working correctly – give yourself 30-minutes to try an

## Technology requirements

- A reliably working <u>computer</u> that runs Windows or Mac OS. Tablets and smart phones might work for some things in this course, but we can't guarantee they will work for everything. Chromebook laptops are also problematic. <u>If you do not have a working computer that runs Windows or Mac OS, contact Information Technology Services about borrowing a laptop from the university</u>. There are also computers for student use in the library.
- 2. Reliable internet access on a regular basis.

#### **TECHNOLOGY CAPABILITIES**

Additional guidance for taking online courses can be found here, Online at SIUE.

Students in my courses are expected to be able to...

• Understand basic computer terminology (e.g., differences btw apps and programs, cloud and local storage, upload and share, ect) and file storage basics (e.g., renaming files, creating folders,

recognizing file extensions, ect.)

- Use a word processor, such as MS Word, to compose assignments, and be able to use <u>tracked</u> <u>changes</u> and <u>comments</u> from your instructor
- Use a slide presentation program such as MS PowerPoint
- Attach files to emails and upload them to Blackboard, Teams, and other repositories
- Give files meaningful names, and store them in <u>meaningful folder structures</u> on your computer (this will be very important in this course make sure you know how to do it)
- Navigate websites and course materials
- Use the 30-minute rule for troubleshooting IT issues
- Reach out to tech support staff when issues arise and troubleshoot to resolve problems

#### **SUBMITTING WORK**

Instructions for submitting assignments will be provided. Lab assignments will be completed in your lab notebook. Some assignments may require you to scan or take a photo of your notebook to upload to BB. Project assignments but be submitted before lab sessions. You will complete these assignments using a shared Word doc, accessible to your instructors. Hardcopies of some project assignments may be required. For all files submitted to BB, be sure to upload the correct file type!!! If I ask for a Microsoft Word document do not submit a PDF, .pages, shared document or any other format. If I ask for a PDF, do not submit a Word doc. There are reasons for this. You may be penalized for submitting assignments in the wrong file format, including receiving a zero on the assignment.

## **COURSE INFORMATION**

## Prerequisite knowledge and credit hours

As a student in this course, it is expected that you:

- have a college level reading ability
- have a basic level of computer competency (see technology capabilities above)
- have a basic level of math competency (arithmetic, basic algebra concepts)
- are a declared psychology major
- · completed PSYC 111 with a grade of C or higher

## Course goals and objectives

- 1. Describe and distinguish among various research methods
- 2. Explain the role of statistics in psychological research
- 3. Discover, read, and evaluate published research
- 4. Design and conduct research studies
- 5. Analyze & interpret data using descriptive & inferential statistics
- 6. Write a research paper in APA style

### Course Tools

- <u>Blackboard</u>: Primarily a "classroom" repository space
  - o Assignments

- o Course Material
- o Other resources
- <u>Microsoft Teams</u>: Primarily a communication space. I recommend downloading and installing the app on your computer instead of using the browser version
  - o Ask questions here
  - o Work on group projects
  - o Office hours
- <u>Posit Cloud</u>: For statistical analysis. Posit Cloud provides free access to a cloud based version of the <u>R Statistical Computing Environment</u>. It provides access to <u>RStudio</u>, R packages (aka, addons) and other tools. We will use Posit Cloud because it will allow us to use these data analysis tools collaboratively. R, RStudio, and R packages are also freely available can all be downloaded and installed to your personal computer.
- Microsoft Office: download and install here, https://www.siue.edu/its/office365/install.shtml
- Qualtrics: For use in research. we'll use this for running surveys and experiments. You must access Qualtrics through the SIUE Qualtrics link, <a href="https://siue.qualtrics.com/">https://siue.qualtrics.com/</a>

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## **Recommended Texts and Resources**

\*Navarro, D. (2019). *Learning statistics with R: A tutorial for psychology students and other beginners* (6.1). Creative Commons. https://learningstatisticswithr.com/book/index.html.

APA (2019). *Publication Manual of the American Psychological Association* (7<sup>th</sup> ed.). Washington, DC: American Psychological Association.

APA Style and Grammar Guides https://apastyle.apa.org/style-grammar-guidelines

\*Note: Navarro (2019) is an open-source text; you can use the provided link to access the text anytime.

## Course Assessments

- PRE-COURSE SURVEY: A self-report questionnaire to measure any preexisting knowledge of research methods and statistics. Full credit just for completing it. A similar post-course questionnaire will be completed at the end of 220 and again in 221.
- CITI Research Ethics and Compliance Training: CITI training is required of all persons conducting research of any kind. This requirement is set forth by federal guidelines and enforced by the institutional review board. If you do not complete the certification, you will not be able to complete the research project and will receive a zero.
- Activities, Attendance and Engagement: There will be at least two lecture sessions and one lab session each week. You are required to attend all lecture and lab sessions. Attendance will be taken at the beginning of each class period so you must be on time. If you have accommodations for extended absences, please see me at the beginning of the semester.
  - During lecture, there may be activities worth

Assessments	Point s
Pre-Course Survey	15
Bring lab notebook	5
CITI Training	15
Activities, Attendance, and Engagement	200
Lab Assignments (25pts x 7)	175
Comprehension Checks (25pts x 7)	175
Group Research Project	200
Literature Library [G]	
Proposal Draft [G]	
Proposal Final [G]	
Intro and Methods I [I]	
Results Output and Summary [I]	
Final Draft [I] [All sections, no	
late days)	
Peer Reviews [I]	
Peer Evaluation [I]	
Final Presentation [G]	
Post-course survey	15
Final exam	200
Total:	1000

- a small number of points. These are graded for completion with a good faith effort. You need to be present in class to earn these points. All lecture activities are due in class on the day they are assigned. There will be about 10 lecture activities (10 of 29 lectures) throughout the semester, one each week. You need to be present and complete at least 8 of 10 satisfactorily to receive full credit.
- For the remaining 19 lecture sessions and 15 lab sessions (34 total), you may miss up to 6 sessions without a penalty.
- You will earn 2.5 points for attending each lecture or lab session (85 points); students who have not missed more than 6 lecture or lab sessions will be given full credit for attendance (100 points). Students who have missed more than 6 lectures or labs will earn the number of points associated with their attendance (if you only come to 15 sessions, you'll earn 37.5 of 100 points, 37.5%).
- Missed classes. It is not necessary to email me if you miss 1-2 classes here or there

for illness or other reasons. Follow the steps in the Missed Classes and Late Submissions section below and return to class when you are able. **Note**: If you are missing class regularly and falling behind, email me as soon as possible.

- Engagement. Engagement is important in this class and essential in lab. If you are not engaged during class, you may be given a warning and/or you may lose your attendance points for the day. Careless, sloppy, or hasty work may not be accepted (all work should represent a good faith effort to meet the demands of the assignment). If the behavior is distracting, disruptive, and otherwise rude, you may be asked to leave the classroom for the day and you will not earn points for attendance, activities, or any extra credit points should they be offered that day. Instructors have discretion to evaluate engagement.
- Lab Assignments: These are not optional! You are required to attend lab! Weekly lab assignments are more focused on developing and practicing skills. Some labs are designed to help you complete your research project and will require group work. There is one lab session per week.
- Weekly Comprehension Checks: These are low-stakes, multiple choice quizzes based on the book chapter readings for that week. Lockdown Browser will be required for quizzes. Quizzes are due by Wednesday morning @ 9am. There will be 10 questions, drawn randomly from a question pool. Before the deadline, you have unlimited time and an unlimited number of attempts. Each attempt will consist of another random drawing of questions. Your score for each will be the highest of all your attempts. You may use your books and notes for the comprehension checks, may not search the internet for answers, or work with anyone else.
- Group Research Project: You will be assigned to a group of approximately 4-5 students. You will work with your group to design and conduct a correlational research study. You will be given a group channel on MS Teams to facilitate working together. The project will be completed in stages with due dates throughout the 8-week course as you create a professional APA style paper. Drafts may be submitted on Blackboard and/or hardcopies may be required in class. Check assignment instructions for details.

Note: Group and individual evaluation: Your group will complete the literature library, proposal draft, final proposal, and final presentation together, and everyone in the group will receive the same scores (at the instructor's discretion). For all the other project components, you will complete your own individual version and receive your own individual score. The intent is that all students will learn the research writing process by doing it independently. However, science is generally collaborative and having the support of knowledgeable people around to help plan your study and interpret your data is an invaluable resource! This structure provides the best of both worlds. Individual and group graded components, along with the group contract and peer evaluation, are effective ways to maintain equity in group work.

I know, everyone hates group work – I know some people don't do their fair share. But trust me. This works. It rewards group members who make and effort and penalizes those who do not.

- **Final Exam:** The final exam will be cumulative. You will complete it in-person during the scheduled final exam session (TBD)
- **Hypothetical** Extra Credit: I reserve the right to *potentially* offer bonus assignments for extra credit. Any such assignments would be *equally available to all students*.

#### WHAT TO DO IF YOU MISS A CLASS OR A DEADLINE

- Make up the missed material. Read the textbook, review the posted slides from lecture, get notes from a classmate.
- **Complete missed work**. Lab assignments will be provided in hard copy only for pick up outside my office or come to drop-in hours.
- **Getting help**. After completing these steps, if you still have questions about what you missed, come to drop-in hours to discuss.
- Attendance points. You will not receive attendance points for missing class, because you can miss up to 6 class periods without penalty.
- **Lecture activities**. If you missed a lecture activity, you will not be able to make it up because you can miss 2 of 10 activities without penalty.
- Late submissions. You have 7 late days to use at your discretion throughout the semester. See the Late Submission Policy below. If you miss class the day you were supposed to turn in a hard copy of your assignment, you must still submit a copy on BB and then you will turn in a hard copy to me or your TA within 5 days of missing class.
- Submit! It is ALWAYS better to submit an assignment late than to receive a zero.

# Grading scale

Final letter grades will be based strictly on the following scale:

Point Range	Maximum Points	Final Grade
895 – 1000	1000	А
795 – 894	895	В
695 – 794	795	С
595 – 694	695	D
0 – 594	595	F

Note. 925 points is 92.5%, and so on. Fractional points will be handled as follows: a final score of 800.50 would be rounded up to 801, and a final score of 800.49 would be rounded down to 800.

## Feedback and grading timeline

We will endeavor to grade and provide feedback within 1 week of submission. For written assignments using Microsoft Word or Google Docs, we will return a document to you with comments and tracked changes. You can find your graded work by clicking the My Grades link on the left menu of the Blackboard course.

# **COURSE POLICIES**

# 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. If you feel you need help with your writing, you are encouraged to seek assistance from the writing center on campus (<a href="http://www.siue.edu/is/writing">http://www.siue.edu/is/writing</a>) or utilize one of the many online resources they have identified to help students (<a href="http://www.siue.edu/lss/writing/resources.shtml">http://www.siue.edu/lss/writing/resources.shtml</a>).

Here are some additional considerations for quality college-level writing in any discipline...

- Clear, direct organizational structure
- Has a clear thesis statement
- Paragraphs are well structured around main ideas
- Provides evidence and analysis
- Uses direct, appropriate language
- Concisely and precisely written
- Uses the appropriate vocabulary for your audience
- Includes a conclusion

#### **COURSE WRITING POLICY**

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 not grade your paper. If more than three writing errors are found on any one page of a written assignment, grading will stop, and the student's paper will be returned with a grade equal to 50% of the total point value for the assignment.

## Al Use Policy

UNACCEPTABLE USE OF AI IS A FORM OF PLAGIARISM AND IS SUBJECT TO THE SAME ACAEMIC SANCTIONS. See the plagiarism policy below.

IN THIS COURSE, STUDENTS MUST BE THE PRIMARY AND MAJORITY
AUTHORS OF TEXT, CODE, ANALYSIS, AND ALL COURSE WORK PRODUCTS
AND ASSIGNMENTS. STUDENTS MUST KEEP DRAFTS OF ASSIGNMENTS AND
LOGS OF INTERACTIONS WITH AI APPLICATIONS TO DEMONSTRATE THEIR
CONTRIBUTION AND ORIGINAL AUTHORSHIP, AND TO CHECK WHAT IS
PERMISSIBLE FOR EACH ASSIGNMENT. ASSIGNMENTS WILL BE SUBMITTED
VIA TURNITIN, A TOOL WITH EMBEDDED AI DETECTION

#### **ABOUT GENERATIVE AI**

Generative artificial intelligence tools [software that creates new text, images, computer code, audio, video, and other content] have become widely available [e.g., ChatGPT for text and DALL-E for images].

This policy governs all such tools, including those released during our semester together. <u>You are</u> prohibited from using generative AI tools on assignments in this course. You are prohibited from using any form of AI to complete exams.

If you use generative AI tools, remember that they are typically trained on limited datasets that may be out of date. Additionally, generative AI datasets are trained on pre-existing material, including copyrighted material; therefore, relying on a generative AI tool may result in plagiarism or copyright violations. Finally, keep in mind that the goal of generative AI tools is to produce content that seems to have been produced by a human, not to produce accurate or reliable content; therefore, <u>relying on a generative AI tool may result in your submission of inaccurate content</u>. It is your responsibility—not the tool's—to assure the quality, integrity, and accuracy of work you submit in any college course. As specified elsewhere in the syllabus, this course may require electronic submission of essays, papers, or other written projects through the originality assessment service Turnitin. Turnitin will also attempt to detect AI-generated text.

#### PERMITTED USES

Use of AI tools to check grammar or style are permitted. When you are unsure, please ask BEFORE using an AI tool. Any student work submitted using AI tools should clearly indicate what work is the student's work and what part was completed by the AI [see below].

For my class, a responsible use of any AI-based tools in completing coursework or assessments must be done in accordance with the following:

- You must **complete the AI Use Log** on [see BB]. It is your responsibility to document your interactions with AI and to maintain a record of your authorship. My recommendation is to screen shot and <u>save everything</u> just in case (i.e., what prompts you used, what answers were produced, where, why, and how).
- You must be transparent in how you used the Al-based tool, including what work is your original
  contribution. An Al detector such as GPTZero (<a href="https://gptzero.me/">https://gptzero.me/</a>) may be used to detect Al-driven
  work.
- This is new territory, but basic attribution rules still apply. Cite everything, otherwise you are likely violating academic integrity policies. You must clearly cite the use of AI-based tools in your work. Any work that utilizes AI-based tools in any way must be clearly marked as such, including the specific tool(s) used. For example, if you use ChatGPT-3, you must cite "ChatGPT-3. (YYYY, Month DD of query). "Text of your query." Generated using OpenAI. <a href="https://chat.openai.com/">https://chat.openai.com/</a>"
- You must ensure your use of Al-based tools does not violate any copyright or intellectual property
- You must not use Al-based tools to cheat on assessments.
- You must not use AI-based tools to plagiarize without citation.

In this class, unacceptable uses of artificial intelligence (AI) assistance will be treated the same as plagiarism and/or an academic dishonesty violation.

<sup>1</sup>Some examples of acceptable and unacceptable uses are provided but this list is not exhaustive. If in doubt, ask.

Acceptable AI use or assistance includes:	Unacceptable AI use or assistance includes:	
Brainstorming a topic	Using AI to draft entire essays or complete unfinished portions of an assignment	
Generating search terms or keywords for research	Using AI to write or rewrite significant portions of a text [i.e., several sentences in a paragraph]	
Formatting citations (keep in mind that AI often includes incorrect quotations and citations within a text)	Using AI to summarize primary material source material [e.g., article summaries]. Rewording an AI generated summary is <i>still</i> plagiarism.	
Finding errors and receiving general suggestions for improving without using AI tools to explicitly compose an essay or text	Using entire sentences suggested by an app without providing quotation marks and a citation, just as you would to any other source. Citations should take this form: OpenAI, chatGPT. Response to prompt: "Explain what is meant by the term 'Triple Bottom Line'" (February 15, 2023, https://chat.openai.com/).	
Searching for specific information as one would	Improperly crediting AI tools for any artistic piece	
do with search engines, browsers, and databases	used for illustrative purposes	
Generating AI artwork, audio, images, or videos with proper credits to the AI tool used	Failing to document appropriate use of AI	

In this class, I permit students to use ChatGPT for the following types of tasks:

- Outlining content
- Providing background knowledge (with the understanding that ChatGPT is often wrong—just read Wikipedia; it's better for this anyways)
- Checking grammar and syntax
- Creating materials [i.e., survey items, sentences, images] for research experiments

#### POTENTIAL CONSEQUENCES FOR INAPPROPRIATE USE OF AI

Depending on the nature and severity of the offense, students will be subject to one or more of the following consequences:

- Meet with instructor to develop a learning plan including clear resubmission due date and consequences for failing to resubmit, likely a 0 on the assignment
- Removal from group project and 20% reduction in total project score
- Zero on the assignment and plagiarism report to the Provost
- Zero on the research project and plagiarism to the Provost
- Fail the course, plagiarism report to the Provost

## Academic integrity/plagiarism

The expectations and academic standards outlined in the <u>Student Academic Code (3C2)</u> apply to all courses, field experiences and educational experiences at the University, regardless of modality or location. 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 <u>SIUE academic dishonesty policy</u>. Students are responsible for complying with University policies about academic honesty as stated in the <u>University's Student</u>

#### Academic Conduct Code.

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 the professor or your TA 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. 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.

We have ways of detecting plagiarism and use of AI, so don't do it!

## Late Policy

You have 7 'late days' to use at your discretion. Each 24-hour period after the due date counts as one 'late day.' So, if you submit an assignment within 24 after the due date, you have used one late day; submit it within 48 hours and you've used 2 late days. If you submit an assignment seven days after the due date, you have used all seven late days on this one assignment and will not be able to turn in any other late assignments without losing points. Said another way, you can be up to 24 hours late on 7 different assignments, 7 days late on one assignment, or you can spread your late days across a couple of assignments. As long as you have late days to use, you will not be penalized for late assignments. If you run out of late days, you will lose 50% of the total points for each day it is late, and no late assignments will be accepted more than 3 days past the due date. NOTE: you may not use late days on group graded assignments, the final paper, or your peer reviews as these assignments depend on everyone's timely submission.

## **ADDITIONAL COURSE POLICIES**

## **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 Hub <a href="https://www.siue.edu/csdi">https://www.siue.edu/csdi</a> 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 <a href="mailto:jball@siue.edu">jball@siue.edu</a>. There is also an online form for reporting bias incidents at <a href="https://cm.maxient.com/reportingform.php?SIUEdwardsville&layout\_id=10">https://cm.maxient.com/reportingform.php?SIUEdwardsville&layout\_id=10</a>.

## 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).

## Regular and Substantive Interaction

Regular and substantive interaction (RSI) is required as part of new U.S. Department of Education regulations for distance (online) education and it supports student learning in all learning environments (online, face-to-face, hybrid, hyflex, etc.). SIUE faculty participate in RSI by initiating frequent and timely opportunities to engage with students. Because there are several ways to implement RSI, such as facilitating online discussions, scheduling a Zoom conference with a student, or holding regularly scheduled review sessions before tests, RSI may look different in every class. To learn more about RSI, use the Online Tips links for Faculty and Students in your Blackboard course websites or visit the <u>Faculty Resources for Regular and Substantive Interaction webpage</u>.

# **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.

## **Technology Privacy Information**

We will be using Blackboard in this course. View the <u>Anthology Blackboard Privacy Statement</u> to review how your data is being used and stored.

# ADDITIONAL STUDENT SUPPORT

## Services for Students Needing Accommodations

It is the policy and practice of Southern Illinois University Edwardsville to create inclusive learning environments. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or to accurate assessment of achievement—such as time-limited exams, inaccessible web content or the use of non-captioned videos—please contact Accessible Campus Community and Equitable Student Support (ACCESS) as soon as possible. In order to properly determine reasonable accommodations, students must register with ACCESS either online at <a href="mailto:siue.edu/access">siue.edu/access</a> or in person in the Student Success Center, Room 1203. You can also reach the office by emailing us at <a href="mailto:myaccess@siue.edu">myaccess@siue.edu</a> 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.

## Academic and Other Student Services

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

- Lovejoy Library Resources
- Academic Success Sessions
- Tutoring Resource Center
- The Writing Center
- Academic Advising
- Financial Aid
- 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 <a href="mailto:cougarcare.siue.edu">cougarcare.siue.edu</a> or by calling <a href="mailto:618-650-2842">618-650-2842</a>.

## **Student Success Coaches**

<u>Student success coaches</u> work across campus to serve the SIUE student population with the tools and resources to adjust to and meet the demands of the college experience. Success coaches provide direct services such as time management support and referrals to campus resources. If you find yourself in need of academic or personal support, or in a situation that is preventing you from being successful in the classroom, please utilize <u>Starfish</u> to connect with a coach as soon as possible. The sooner you

engage, the sooner you can access the information or tools you need that may help you get back on track.

## **Technical Support**

Since this is an online course, you are expected to have reliable Internet access on a regular basis. It is your responsibility to address any computer problems that might occur. Such problems are not an excuse for delays in meeting expectations or for missing course deadlines.

Contact ITS at <u>618-650-5500</u> or at <u>help@siue.edu</u> with any technical concerns. You can also check the functionality of University systems, including Blackboard, at the <u>ITS System Status page</u>, or search the <u>ITS Knowledge Base</u> for various how-to and troubleshooting guides.

Tips for taking online assessments:

- Set up a wired (Ethernet) Internet connection on your computer
- Do not use a mobile device, such as a phone or tablet
- Read the instructions and directions carefully
- Be prepared to complete the assessment in the allotted time

#### RESEARCH DESIGN AND STATISTICS I

The schedule is subject to change at the instructor's discretion. Changes to the schedule may be announced on Teams. If substantial changes need to be made to the schedule, a revised reading and assignment schedule will be posted on BB.

All assignments must be submitted on BB or Teams as described in the assignment – no exceptions. Assignments emailed to me will not be accepted.

# **COURSE SCHEDULE**

Schedule subject to change at instructor's discretion

Week	Course Topic	Readings	Lab Topic	Assignments Due
1	Science and research	M Ch 1	Intro to Survey Project	L: ^Bring Lab Notebook
2	Questions, hypotheses, and variables	M Ch 2 M Ch 3	Getting Started in Research	L: Guided Reading of Malone et al. (2012) L: Construct Ideas
3	No Class Monday 9/1 Research Designs	M Ch 6	Hypotheses, Questions, Methods	Pre-course Survey L: Group Contract P: Literature Library
4	Research Designs	M Ch 6 [see also M Ch 12]	Surveys	L: Proposal Pitch
5	Surveys and Sampling	M Ch 5	D: Designing Considerations	P: Proposal Draft
6	Ethics and Plagiarism	M Ch 4	W: Methods Section	CITI certificate
7	Statistical Reasoning	S Ch 1 –	W: Intro Section	P: Proposal Final [Qualtrics]
8	Frequency and Central Tendency	S Ch 3	APA: The Language of Science	P: Intro and Methods
9	Variability	S Ch 4	A: Descriptive Statistics	L: Intro to R for Data Analysis
10	Correlation [and Regression]	S 14	A: Correlational Analyses	L: Stress Data Analysis
11	Probability and z- scores	S Ch 5	A: Project Data Analysis	P: Output and Summary
12	Probability and z- scores	S Ch 6	W: Results, Figures, Tables	L: APA Figure
13	Extras: Observational Research and Chi- Square	M Ch 13, S Ch 15	W: Discussion	**P: FINAL PAPER DUE – NO LATE DAYS ALLOWED
14	Catch-up and Review		W: Presentations, Publication and Review	P: Peer Reviews
	No class o	ı r lab: Thank	l sgiving Break 11/24 – 11/28	
15			Final Presentations	P: Presentations Post-course Survey

16 Final Exam:

#### **Assignments**

- Project assignments MUST be completed BEFORE the start of lab and submitted in-person
  - Project assignments require time outside of class and lab plan accordingly
  - o No late days can be used for group graded project assignments or the final paper
  - \*Failure to submit the final paper on time will result in a zero on the peer review assignment
- Lab assignments are expected to be completed in lab. Incomplete assignments can be submitted in class or on BB the following Monday by 9am.
- Other all assignments are due in class or on BB by Monday @ 9am, including weekly quizzes

^A physical notebook dedicated to your lab project is required. Your lab notebook is subject to review by the instructors if requested [i.e., if we want to see your notes, we will ask for your lab notebook]. Information in the lab notebook is not private – it is considered a part of your assignment. Do not record personal notes or information in your lab notebook. Class notes should be recorded in a separate notebook. Class notes are considered private and not subject to review. If you use the same notebook for both the lab project and class notes, class notes might become subject to review.

\*A 3-subject, spiralbound notebook with a folder page insert is requested. This will allow you to keep track of your project development and reading notes. You will need to bring hardcopies of your annotated notes to lab meetings. Annotated notes should be stored in the folder of your lab notebook.

L = Lab Assignment

P = Project Assignment

D = Design Intensive

W = Writing Intensive

A = Analysis Intensive