

Instructor: Dr. Betsy Meinz Office: Alumni Hall, #0131 Contact: emeinz@siue.edu , 650-3646	Research Design and Statistics I (PSYC 220-004/005) Lecture: 8-9:50 MW (FH0116) Lab 004: 8-9:50 F (AH1314) Lab 005: 10-11:50 F (AH1314) 8 weeks: 1/10/22 – 3/4/22 Course Description from College Catalog: Methods for designing psychological studies, and the statistics used to describe and interpret the data. Focus on nonexperimental method. Prerequisite: A C or better in PSYC 111.
GTAs: Kendra Clark & Royce Hill Office: Alumni Hall, #0318/0319 Email: kendrcl@siue.edu ; royhill@siue.edu	
Office Hrs: MON: 12:30-1:30 (DrM) TUES: 12-1 (KC) WED: 12:30-1:30 (DrM) THURS: 12-1 (KC), 1-3 (RH)	

COURSE OBJECTIVES

After successfully completing this course, you should:

- understand the role of statistics in psychological research
- know which statistical analyses to perform on different types of nonexperimental research designs
- be able to use SPSS (computer software for statistics) to analyze survey data
- quickly compute basic statistics by hand
- be adept at designing and conducting non-experimental (e.g., surveys) research studies
- be able to report the findings of your research in APA Style
- critically evaluate non-experimental research you read (in terms of quality of research, validity, ethics, etc.)

WHAT'S THIS CLASS ALL ABOUT?

This class is designed to help you understand how psychological science is conducted so that you can a) better understand and critically evaluate what you read, and b) conduct the science yourself! Accomplishing these goals will be achieved by having you read articles, write about your own and others' research, think critically about research and topics we discuss in class, and calculate statistics for interpretation in the context of scientific research.

WHAT GENERAL SKILLS YOU SHOULD GAIN/IMPROVE IN THIS CLASS

Skill	How You'll Learn It
Understanding of how to learn	Experiencing a course designed with the science of learning in mind (e.g., repeated testing, applied exercises, etc.)
Reading skills	Reading the text, reading journal articles
Critical thinking	Understanding how science can produce trustworthy results, and how GOOD science is conducted. Examination of poor and good science.
Writing skills	Writing with drafts and feedback and clear expectations
Following directions	Adhering to the rules of APA Style

DR. MEINZ'S ROLE AND RESPONSIBILITIES FOR THIS COURSE

In teaching this course, I see my job as facilitator. I will do some lecturing, but you will also learn from reading and watching existing materials *outside of class*. A lot of class time will be spent in activities designed to further your understanding of the material that you read/studied outside of class. My goal in creating the course is to give you all the tools that you need to successfully master the material.

YOUR ROLE AND RESPONSIBILITIES FOR THIS COURSE

Prepare for, and attend, class. Play an active role in your learning by being present (physically and cognitively) and undistracted during class. Remember that the opportunity to earn a college education is a privilege; take full advantage of this opportunity.

COURSE MATERIALS

Rented Textbooks:

Gravetter, F. J., & Wallnau, L. B. (2018). *Essentials of statistics for the behavioral sciences* (9th ed.). Belmont, CA: Cengage.

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

Calculator:

You need a calculator for this course. You may not use your phone or a graphing calculator on exams; any other *simple* calculator will do.

SPECIAL NOTES ABOUT 220/221

-You should be registered for at least 15 credit hours this semester *if it is important that you remain a full-time student*. Why? In the unfortunate event that you fail this course, you will drop PSYC 221, which will reduce your credit hours. Thus, you must have 15 hours in order to be able to drop PSYC 221 and still remain at full-time status (12 hours).

-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.

-A grade of C or better is required to progress to PSYC221. If you earn a course grade of D or F, it is your responsibility to contact your adviser *immediately* to determine whether there is any possibility of getting enrolled in a section of this course next semester.

GETTING HELP FOR PSYC 220

You are strongly encouraged to get help in this class, as you will only learn Statistics/Methods through practice. University policy suggests you spend 2 hours outside class for every hour inside class, which means you can anticipate spending up to **12** hours outside of class per week on this 8-week course. That equates to about 4 hours of work to prepare for Monday’s class, 4 hours per week to prepare for Wednesday’s class, and 4 hours to prepare for Friday’s class. Some of this time will have to be here on campus in the computer lab. If you do not have the time to do so, you should consider taking this course another semester.

In addition to Dr. Mainz’s and the TAs’ office hours, this class has a Discussion board. If you have a question about something, you’re probably not alone! Please utilize the discussion board for class-related questions when possible---Dr Mainz has this set to alert her email, so you’ll get as quick of a response that way as by email, AND you’ll benefit your classmates!

HOW TO REACH YOUR POTENTIAL IN THIS CLASS

1. Read/do all assigned work before class. Fill out the *Things to Know* while you read—it is much easier to review your text notes before an exam than to re-read all the chapters. If you have *a few* questions, bring them to class. If you have *a lot* of questions, see Dr Mainz or the TA for help before class.
2. Attend all classes and labs, and participate actively. Put in your “all” when we do in-class work and take-home work *even if they are not worth a lot of points*. Doing so will lead to deep learning; the payoff will be in your exam performance.
3. Come in for help at the first sign of trouble--do not wait until you receive a poor grade to get help.
4. Keep up—it is very difficult to catch up in this accelerated class. Also, put in your 12 hours of work/week outside class.
5. Invest in a 3-ring binder. Put syllabus, all handouts, notes, homeworks, etc., in an organized fashion in this binder. Keep the binder for use in subsequent courses, especially Capstone!

GAINING POINTS

Introductory Survey Free points. You’ll do this in the first few days of class. **10 points**

Weekly Things to Know You can upload your completed *Things to Know* to Bb on Wednesday before class for 10 points. These are easy points to earn if you are doing the preparation for the course. These will also help you prepare for the exams, as they will serve as notes for you to study. One of these will be available each of the 8 weeks, but you may drop your lowest grade (or a missing grade). **7 x 10 points = 70 points.**

Weekly Online Quiz You can take the online quiz as many times as you wish before the Wednesday morning deadline. The quiz is based on everything that's been covered since the previous quiz. These are "low-stakes" quizzes; they're designed to help you learn the material. They are worth 10 points apiece, and one of these will be available each of the 8 weeks. You may drop your lowest grade (or a missing grade). **7 x 10 points = 70 points.**

Final Exam There will be a midterm exam and a final exam in this course. If you know all of the *Things to Know*, you should be well-prepared for the exams. The midterm is worth 200 points, and the final exam is worth 300 points (200 points based on material learned since the midterm and 100 points of cumulative information). **500 points.**

Lab Assignments Across the semester, you will design and implement a survey project. You'll analyze the data, and then write an APA Style research report based on this project. The lab assignments are pieces of that paper that you'll turn in weekly so that you can get feedback. These are worth 25 points apiece, and they are due (uploaded to Bb) by **Friday at 8AM. 150 pts**

Final Paper The final paper is due at **8AM on Wednesday of the 8th week of class. 200 pts.**

Point break-downs All of your grades will be recorded in terms of points.

<u>Item</u>	<u>Points</u>
Introductory survey	10
Quizzes: 7 @ 10 pts	70
TTK notes 7 @ 10 points	70
Midterm exam	200
Final Exam	300
Lab assnmts: 6 @ 25 pts	150
Final paper	200
TOTAL POSSIBLE	1000

Grades Your grade will be assigned based upon a 90% (A), 80% (B), etc., grading system. I do not routinely round or curve final grades, but in very close cases I will consider your participation/attendance.

CLASS POLICIES

Class attendance You are expected to be on time and prepared for all classes and labs, and to stay the entire class period. Absence from class/lab will affect your grade. What you learn in class can't be easily made up, and you can't learn the same information on your own that you can learn through in-class exercises. Considerations for "close" final grades will only be made for students with excellent (i.e., missing no more than one class period) attendance.

Missed/late work

Quizzes and TTK notes: You may drop your lowest score. If you miss one, that can count as your lowest score.

Midterm exam: A missed midterm exam will be administered along with the final exam.

Final exam: Please note that the final exam is scheduled for the Friday before Spring Break. The exam will not be administered early, and cannot be taken late.

Drafts/final paper: Late drafts/papers will have 20% deducted for each 24-hr period they are late (e.g., 20% off for up to 24 hours late, 40% off for up to 48 hrs late, etc.). You should complete all assignments in advance of their due dates AND SAVE THEM IN ONEDRIVE in case you need help or are unable to complete them at a later time.

Blackboard Class materials will be available on Blackboard--make sure to check BB regularly for any announcements. You are responsible for any information sent via announcement/SIUE email. Check these resources daily.

Departmental policy on plagiarism Plagiarism includes either presenting someone else's words without quotation marks (even if you cite the source) or presenting someone else's ideas without citing that source. If you plagiarize, your instructor cannot evaluate your understanding of the topic. When paraphrasing from another source, at the very least the student should change the wording, sentence syntax, and order of ideas presented in the paper. 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>.

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 Mainz or a TA BEFORE you turn in a plagiarized paper. Ignorance is not an excuse for plagiarism, and all cases of plagiarism will be treated the same despite their intentionality.

Academic Honesty In this course, you are NOT ALLOWED TO WORK ON YOUR PAPERS TOGETHER, OR TO LOOK AT EACH OTHER’S PAPERS, PERIOD. In addition, you must work independently on all exams. If you are involved in any case of academic dishonesty (e.g., you copy work from a classmate or other source, OR your actions allow another student to copy from you, you forge an assignment or plagiarize, etc.), you will earn an F in the class and the offense will be reported to the Provost’s office.

Department of Psychology Policy on Incomplete Grades, P/F Credit Options and Withdrawal

All withdrawals must be completed by the end of the 13th week of classes during fall and spring, and by a similarly late date (i.e., before 82% of class meetings have occurred) in any summer term. When students discontinue attending class and do not withdraw from a course they may receive the grade of UW (Unauthorized Withdrawal). The grade of UW will only be given when a student’s grade based on the course requirements is an F. The grade of UW is calculated as an F in a student’s grade average. The granting of a grade of I (Incomplete) is not automatic and is available only in cases when a student has completed most of the work required for a class but is prevented by a medical or similar emergency from completing a small portion of the work not later than the end of the following semester. An I must be approved by the instructor with appropriate documentation provided by the student. If an instructor agrees to give a student an I, the instructor will fill out a Memorandum of Incomplete Grade to be kept with the student’s records. If the work is not completed by the time specified on the Memorandum, the student’s grade will be changed from I to F.

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 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 24 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.

Computer labs You will need to use SPSS in this course. All computer labs in FH, AH, and in the library (as well as the residence halls) have SPSS (see http://www.siue.edu/its/labsclassrooms/computer_labs_locations_new.shtml for the locations).

In addition, you may want to install SPSS on your home computer/laptop. For information on how to do so, please see the ITS page (<https://www.siu.edu/its/labsclassrooms/vlab/spss.shtml>) . If you need help with the installation, you must contact ITS (650-5500).

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 notify the instructor as soon as possible. Students are also encouraged to contact Accessible Campus Community and Equitable Student Support (ACCESS). The ACCESS office is located in the Student Success Center, Room 1270. You can also reach the office by myaccess@siue.edu or by calling 618-650-3726.

COVID-19 Pandemic Policies Related to Classroom Instruction (Spring 2022)

The measures outlined below are required and any student who does not comply may be in violation of the *COVID-19 People-Focused Health and Safety Policy*, as well as the University's *Student Code of Conduct*. The full text of the *COVID-19 People-Focused Health and Safety Policy* can be found here: <https://www.siu.edu/policies/Covid.shtml>

Classrooms, Labs, Studios, and Other Academic Spaces

Under current University policy, whether in the classroom, lab, studio, or other academic spaces, students (regardless of vaccination status) shall wear face coverings that fully cover the nose and mouth and practice physical distancing measures to the extent practicable based on the specific classroom capacity and pedagogy. Classroom furniture should not be rearranged, and furniture that has been taped off or covered should not be used.

Students who forget to wear a face covering will be reminded of their obligation to comply with SIUE's *COVID-19 People-Focused Health and Safety Policy* and temporarily asked to leave the class until they are able to conform to the policy. Students who forget or lose their face coverings may be able to obtain replacements from a friend, a faculty member, or a nearby departmental office. Face coverings are also available for purchase in the Cougar Store (MUC).

Students who refuse to wear a face covering will be asked to leave the classroom and referred to the Dean of Students for non-compliance with community health and safety protocols. Repeated non-compliance may result in disciplinary actions, including the student being administratively dropped from an on-ground/face-to-face course or courses without refund if no alternative course format is available.

If a student has a documented health condition which makes wearing a face covering medically intolerable, that student should contact ACCESS to explore options with the understanding that ACCESS will not grant accommodations which excuse the need for a face covering while on campus or in the classroom. ACCESS will work with qualifying individuals to find reasonable alternatives, whenever such solutions are available. Please call or contact the ACCESS Office via email to schedule an online appointment to discuss potential alternatives. ACCESS office (Student Success Center, Room 1203, 618-650-3726, and myaccess@siue.edu).

General Health Measures

At all times, students should engage in recommended health and safety measures, which include:

- Conducting a daily health assessment. If you have [COVID-19 symptoms](#), but not yet tested positive, have had COVID-19 close contact exposure, or are COVID-19 diagnosed as presumptive or confirmed positive, contact your health provider or SIUE Health Service at cougarcare@siue.edu or 618-650-2842. More information on reporting procedures is available [here](#).
- Frequent washing or disinfecting of hands.
- Adhere fully to the current face mask and physical distancing rules as articulated in policy: <https://www.siu.edu/about/announcements/coronavirus/safety-guidelines-support/face-mask-pick-up.shtml>
- If present, adhere to directional signs and traffic flow patterns in buildings and offices. In many spaces, doors for entering and exiting buildings are designated.

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>.

Potential for Changes in Course Schedule or Modality

As the COVID-19 pandemic continues, 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.

Dr Meinz's Quick and Dirty COVID policy

1. Wear your mask in my class, with your nose covered, at all times. If not, I'll ask you to leave.
2. We will still do some groupwork in this class, but keep your prescribed distance.
3. If you have covid, stay home, and contact me before you miss class so that I can arrange for makeup work.
4. This class is scheduled as an in-person class. When classes resume in person, so will this class.
5. You will need to use a computer (not a phone or an ipad) for synchronous, online class meetings. If you need a laptop, contact Financial Aid by phone (618- 650-3880), email (finaid@siue.edu), or <https://www.siue.edu/financial-aid/contact-us/index.shtml>. This class moves VERY quickly, so not having access to the resources you need will affect your progress in the course.

Schedule

Note: MUCH more detailed (and up-to-date) information can be found on Blackboard—This information is meant to serve as an overall view of the course. This schedule is TENTATIVE and may be modified.

Week	Topics covered
1	Intro to the course; psych as a science; reading and summarizing journal articles; intro to your project; finding journal articles
2	Constructs and variables; sampling; writing survey questions; citing journal articles and writing hypotheses and Method sections
3	Research ethics; writing Introductions; SPSS-descriptive statistics
4	Descriptive statistics (continued), variability; Results writing, SPSS
5	Correlation and regression; Discussion writing; SPSS
6	Regression; z-scores and probability; SPSS
7	z-scores and probability; Abstract writing
8	Flex time, review, final exam

Class meetings (subject to change due to covid)

***Asynchronous:** course materials posted for you to watch/read/do/etc, no formal class meeting

***Synchronous:** meet in person (when allowed) or online at class time.

	Monday	Wed	Friday
Week 1	Synchronous	Synchronous	Synchronous
Week 2	No class (MLK)	Synchronous	Synchronous
Week 3	Asynchronous	Synchronous	Synchronous
Week 4	Asynchronous	Synchronous	Synchronous
Week 5	Synchronous midterm	Synchronous	Synchronous
Week 6	Asynchronous	Synchronous	Synchronous
Week 7	Asynchronous	Synchronous	Synchronous
Week 8	Asynchronous	Synchronous	Synchronous final