

Data Analysis with SPSS – PSYC 422-001

A course offered by
The Department of Psychology
Fall 2018

Meeting Time: Monday & Wednesday 12:00 - 1:15 p.m.
Room: Founders Hall 0303
Instructor: Christopher B. Rosnick, Ph.D., MPH
Office Location: Alumni Hall 0127
Office Hours: Monday and Wednesday 11:00 – 12:00 p.m. and by appointment
Phone: 618-650-5351
E-mail: crosnic@siue.edu

TAs: Mackenzie Harrison
Office Location: AH 0312 (if needed)
Office Hours: By appointment
e-mail: macharr@siue.edu

Required Texts:

Pallant (2013). *SPSS Survival Manual, 5th Edition*. New York: McGraw-Hill.

There is also an eBook:

https://vufind.carli.illinois.edu/vf-siue/Search/Home?search=new&start_over=1&lookfor=spss+survival+manual&type=all

Supplemental readings (if any) and video lectures will be posted in Blackboard.

To access SPSS off campus: <https://www.siue.edu/its/labsclassrooms/vlab/index.shtml>

Click on “Remote Access Login” and follow prompts

Course Description and objectives:

This course provides a comprehensive overview of how to use SPSS to create datasets, recode variables, "clean" data, run different types of analyses, interpret the output, and write the findings in APA style. Objectives include increasing students' knowledge about:

1. The process of collecting data, creating a dataset, and cleaning the data.
2. Transforming data (e.g., computing variables, transforming variables)
3. Running different statistical analyses (without the use of a step-by-step handout---you should be able to create this on your own via the discussion/ homework).
4. Reading and interpreting SPSS output.
5. How to determine the appropriate analysis to conduct based on the type of data.

Ultimately, students will become more confident in their ability to use SPSS on their own.

Expectations

1. Attendance is **MANDATORY**. There will be a lot of demonstrations in class that are not in the text, and this material will be on the tests. More importantly, any unforeseen changes to the syllabus will be announced in class.
2. You are expected to be prepared for class each time; be prepared to discuss class content. Reading the material is imperative in understanding the background to what you will be doing in class.
3. Your notes from 220/221 will be helpful. I assume that you have basic knowledge of SPSS, and that you have the statistical and methodological knowledge you gained in 220/221.
4. As stated in your college handbook, you should expect to work 2 hours outside of class for every hour inside class. It is necessary that some of the time you spend outside of class must be spent here at SIUE (in a computer lab).
5. If you have difficulty with any of the content of the class or the assignments, please feel free to visit with me during office hours. If office hours are not convenient for you, I am happy to meet with you on an appointment basis.
6. If you need to be absent due to medical reasons (yours or your immediate family's) on a test day or a day that an assignment is due, please provide a physician's note and notify me **PRIOR** to class.

Other Points:

1. Read the assigned material by the date assigned. It will make the lecture easier to understand, will improve class discussion, and will allow you to ask questions if something is unclear.
2. Lecture material will overlap with the text, but will introduce new material not included in the reading. Not all material in the text will be covered in class. In order to do well in the class, you must read and understand the text, and attend and understand the lectures. Each exam will include material from lectures not in the readings, and vice versa.
3. Participate in class – ask questions and join in discussion (It will help you remember the material better).
4. The syllabus is **TENTATIVE** and will be used as a guide, but be prepared if we get ahead or behind schedule.

Grades

Homework/ In-class assignments (300+)

There will be approximately 6 homework/ in-class assignments throughout the semester. They will consist of running analyses (using SPSS) on your own, writing the results in APA style, and will be worth 50 pts each. There will be no make-up assignments offered.

Exams (100 pts. each)

You will run analyses to answer two questions: 1) are there group differences on an outcome; and 2) what is the relationship among two (or more) variables on a third variable.

Quiz (50 pts.)

The quiz will cover material from the text, lectures and class discussion. The quiz will assess your ability to apply the information, on a more conceptual level, in a research scenario.

The quiz will be worth 50 points. I will not hand out any quizzes after the first quiz has been turned in, so be on time. There will be no make-up quizzes offered.

Video Presentation (100 pts.)

You will develop a testable hypothesis, find suitable measures, collect data on 30 people (minimum), run all the appropriate analyses, and prepare a video to present your findings to me.

Reflection Paper (20)

At the end of the semester, you will turn in a paper that details what you have learned throughout the semester. In addition, I would like you to list things you liked about the course and things that you think can be improved.

Your grade will be based on the following (subject to change):

	Points
Individual Grades	
<i>Homework & In-class assignments</i>	300
<i>Exam 1</i>	100
<i>Exam 2</i>	100
<i>Quiz</i>	50
<i>Presentation</i>	100
<i>Reflection Paper</i>	20
<i>Participation/Attendance</i>	65
<i>TOTAL POSSIBLE</i>	<i>735</i>

Your grade will be assigned based upon a 90% (A), 80% (B), etc., grading system. **I will not curve or round in grading.**

CLASS POLICIES:

Attendance

Attendance is mandatory. Please send me or one of the TAs an e-mail or call if you will not be in class (students are responsible for getting any assignments made during class if absent).

E-mail

Please use appropriate salutations when you e-mail me. Also, be sure to “sign” the e-mail so I know who I am speaking with. If you leave out either one of these, I will not respond.

Blackboard

I will post information on Blackboard, including course lectures (potentially) and articles for you to download and read. You will need Microsoft PowerPoint to view the lectures and Adobe Acrobat to view the articles. Lecture videos and notes will be posted **after** lectures. There will be a lag between the lecture and being posted due to editing. These videos and notes are provided to help you study and should be seen as a luxury, not a right. The articles should be downloaded and read before the date they will be covered. Check the Blackboard site regularly (at least once a day) for announcements/ updates. You are responsible for any information I post there.

Assignment Due Dates

No assignments/papers/etc will be accepted late. If you miss an assignment, you will receive a 0 for that assignment.

Class Environment:

It is important to recognize that the classroom is an environment that requires respect for all participants. Therefore, students are expected to conduct themselves in a considerate manner. This means: being on time; turning off and putting away cell phones, iPods, laptops (unless strictly for note taking) and headphones; avoiding extraneous talking and chat; refraining from reading non-class materials; and eating in class. **If we see you using the computer for anything but class related work (e.g., Facebook, e-mail, etc.) during lecture, we will ask you to leave for the day.**

Course Materials:

Materials used in this class, including papers, exams, and grading materials will be retained only through August 2019, after which they will be destroyed.

Tapes and Notes

It is not permitted to sell notes or tapes from this class without the expressed written consent of the instructor. Not only is it not permitted; it is illegal.

Students Needing Accommodations: Students needing accommodations because of medical diagnosis or major life impairment will need to register with **Accessible Campus Community & Equitable Student Support (ACCESS)** and complete an intake process before accommodations will be given. Students who believe they have a diagnosis but do not have documentation should contact ACCESS for assistance and/or appropriate referral. The ACCESS office is located in the Student Success Center, Room 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 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.

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.

DEPARTMENT OF PSYCHOLOGY POLICIES:

Incomplete Grades and Withdrawals: 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. Grades that apply to students who initiate a withdrawal and grades that apply when a student fails to officially withdraw within established deadlines are determined by university policy (see <http://www.siue.edu/policies/1j1.shtml>). The granting of a grade of I (Incomplete) is not automatic. It 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 coursework

before the deadline for grade submission. 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.

Academic Dishonesty: Cheating is defined as follows: (a) the unauthorized granting or receiving of aid during the prescribed period of a course-graded exercise: students may not consult written materials such as notes or books, may not look at the paper of other students not consult orally with any other student taking the same examination; (b) asking another person to take an examination in one's place; (c) taking an examination for or in place of another student; (d) stealing visual concepts, such as drawings, sketches, diagrams, graphs, maps, etc., and presenting them as one's own; (e) stealing, borrowing, buying, downloading from the internet, or disseminating tests answer keys, or other exam materials, except as officially authorized, as in the case of research papers, speeches, etc.; (f) stealing or copying of computer programs and presenting them as one's own, which includes the use of another student's program as obtained from the magnetic media or interactive terminals or form cards, print-out papers, etc.

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>.

Writing Policy: This following policy statement (approved on April 10, 2015) will apply to all undergraduate psychology courses at the 200-level and above.

"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.siu.edu/is/writing>) or utilize one of the many online resources they have identified to help students (<http://www.siu.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 (see below for the specific policy for this class).

The penalty for unacceptable writing in this class is as follows: N/A

TENTATIVE Course Schedule

<i>Date</i>	<i>Topic</i>	<i>Readings</i>
M- Aug 20	Introduction/ Overview	
W- Aug 22	Getting Started	Part 1: Chps. 1-3
M- Aug 27	Descriptive Statistics/Outliers/z-scores and crosstabs	Part 2: Chps. 4 & 5 Part 3: Chp. 6
W- Aug 29	Clean data, split file, compare means, practice exercises	
M- Sept 3	Labor Day- NO CLASS	
W- Sept 5	APA style tables and figures Research Questions Due Assign HW1	Part 3: Chps. 8 & 9
M- Sept 10	Cut points/ recoding new variables/ reverse coding/ reliability Assign HW2	Part 3: Chps. 8 & 9
	<u>READ CHAPTER 10 AND</u> <u>WATCH ANOVA MODULE BEFORE NEXT</u> <u>WEEK!!!</u> www.siu.edu/education/psychology/resource/statistical-modules.shtml	
W- Sept 12	T-tests: One-sample, Independent-Samples, Paired-Samples	Part 5: Intro & Chp. 17
M- Sept 17	T-tests: One-sample, Independent-Samples, Paired-Samples	Part 5: Intro & Chp. 17 Part 5: Chp. 18
W- Sept 19	t-test practice examples Assign HW 3 Measures Due	
M- Sept 24	ANOVA: One-way	Part 5: Chp. 19
W- Sept 26	ANOVA: two-way	Part 5: Chp. 20
M- Oct 1	ANOVA: two-way	
W- Oct 3	ANOVA: repeated measures, mixed model Assign HW 4	

M- Oct 8	Finish HW4	
W- Oct. 10	Go over HW4 Review for Exam 1	
M- Oct 15	Exam 1: Part 1	
W- Oct 17	Exam 1: Part 2	
M- Oct 22	Go over Exam 1 Code variables	
	<u>WATCH REGRESSION MODULE BEFORE NEXT WEEK!!!</u> www.siu.edu/education/psychology/statistical-modules.shtml	
W- Oct 24	Correlation/ Simple Regression	Part 4: Chp. 11 & 12
M- Oct 29	Multiple Regression, hierarchical regression, mediation	Part 4: Chp. 13
W- Oct 31	Practice exercises	
M- Nov 5	HW 5	
W- Nov 7	Mediation	Part 4: Chp. 13
M- Nov 12	Interactions in Regression	
W- Nov 14	Curvilinear Relationships	
M- Nov 19	Thanksgiving Break	
W- Nov 21	Thanksgiving Break	
M- Nov 26	Review for Exam 2	
W- Nov 28	Exam 2: Part 1	
M- Dec 3	Exam 2: Part 2	
W- Dec 5	Quiz Videos Due	

W- Dec 12	Reflection Paper Due via Email by 10 am (preferably sooner)	
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By following our department's Twitter page (@SIUEpsychology) you will be able to get announcements, find out what is happening in the department, and learn more about recent psychology news. Also, this is also a great way to stay connected with the Department of Psychology after you graduate from SIUE.
