Psychology 395 (Spring 2021) Research Design and Measurement in Psychological Research

Lectures: Tuesday & Thursday 9:10pm - 10:00am, via ZOOM

Labs: (times below), via ZOOM

Instructor: Rick DeShon

ZOOM Office Hours: Tuesday 10:30-11:30am, Friday 11:30-12:30pm

E-mail address: deshon@msu.edu

Text: You can use the most recent 2020 4th edition or the 2017 3rd edition.

Morling, B. (2020). Research methods in psychology: Evaluating a world of information (4th ed.), New York, NY: Norton.

Course Webpage: D2L (<u>https://d21.msu.edu/</u>). This site provides the notes for the lectures, grades, and other important class information.

Course Objectives: There are four major goals for PSY 395. First, students will gain mastery over basic concepts in psychological measurement and research design. Second, students will learn how issues of measurement and design constrain the kinds of inferences that are drawn from psychological research. Third, students will further develop their abilities to critically evaluate psychological research, especially from a methodological perspective. Finally, students will develop their writing skills by producing a well-written final project.

Prerequisite: PSY 395 is not a statistics course but you will apply the knowledge you gained in PSY 295 such as correlations, t-tests, ANOVA, and basic regression. If it has been a while since you have taken statistics, you will likely benefit from reviewing this material. Many students find this site useful - http://vassarstats.net/textbook/. The following chapters/sections are the most useful for this course: 4, 9, 10, 11, 12, 14, and 16.

Graduate Teaching Assistants

Eric Chantland (chantlan@msu.edu) Office hour XXXXX 2:30-3:30pm (or by appt.)

Sergio Marquez (marquezs@msu.edu) – Office hour Wednesday 10:30-11:30 (or by appt.)

Mariah Purol (purolmar@msu.edu) – Office hour Monday 1-2pm (or by appt.)

Prachi Solanki (<u>solanki7@msu.edu</u>) - Office hour: Thursday 11:15am-12:15pm (or by appt.) https://msu.zoom.us/j/95487299361?pwd=TnUyREdCT2FrMkZDNUVhck1Uc0l5QT09 Passcode: psy395

Zach Woessner (woessne4@msu.edu) – Office hour Tuesday 11am-12pm (or by appt.)

Laboratory Sections: Labs begin meeting the week of February 1st. You must attend the lab section for which you are officially registered. Normally your labs are held in 012 Olds Hall but during Covid we'll be meeting remote via ZOOM. Here is the list of laboratory sections and TAs:

Section	Day	Time	TA
1	Monday	8:00-9:50 am	Eric
2	Monday	4:10-6:00 pm	Eric
3	Tuesday	10:20am-12:10pm	Prachi
4	Tuesday	4:10-6:00pm	Prachi
5	Wednesday	8:00-9:50am	Sergio
6	Wednesday	12:40-2:30pm	Zach
7	Thursday	10:20am-12:10pm	Zach
8	Thursday	4:10-6:00pm	Eric
9	Friday	10:20am-12:10pm	Mariah
10	Friday	12:40pm-2:30pm	Sergio

Evaluation Criteria:

Exams: Four exams will be given in class – three REGULAR EXAMS taken during the scheduled lecture period, and one FINAL EXAM taken during the scheduled final exam period. The first three REGULAR EXAMS emphasize material covered since the previous exam (in lecture and lab); however, the material in this class is more or less cumulative given that basic concepts from the first portions of the class are always relevant. The FINAL EXAM is cumulative. Each exam consists of multiple-choice and true/false questions. I will drop your lowest REGULAR EXAM score. Everyone must take the FINAL EXAM. Your two highest REGULAR EXAM scores and your FINAL EXAM score account for 50% of your final grade.

REGULAR EXAMS: All REGULAR EXAMS will begin at 9:10am. You may arrive late, but no more exams will be handed out after the first student completes the exam. These exams must be turned in by 10:00am.

FINAL EXAM: The FINAL EXAM is on Tuesday, Apr 27 2021 3:00pm - 5:00pm via D2L.

No makeup exams will be given unless you have a valid, documented excuse (e.g., a note from the dean, a note from your doctor recommending that you not attend class). Any notes must explicitly state that "This student was unable to take the exam on (date) because ______." A bad cold is not an acceptable excuse. The note cannot come from someone in your family. If you cannot get a note or if your excuse involves something that is personal and that you want to keep private, you must get a note from the Dean. You must notify the professor that you have a valid excuse by the end of the day of the exam or you will not be allowed to take the makeup exam. There are no exceptions to these rules.

If you cannot take the exam because of a religious holiday, required participation in a university-sanctioned event (e.g., a commitment for a sports team), or some other acceptable event that can be foreseen, you must notify the professor at least two weeks in advance of exam day. Absence from an exam for any other reason – family obligations, job interviews, and vacations – will result in a grade of 0 for that exam (remember that your lowest REGULAR EXAM grade will be dropped).

Lab Activities: There are 9 lab activities. The first one is worth 10% of your grade and the remaining 8 activities combine for 40% of your total course grade. Each one must be turned into your TA before the start of your lab the week they are due. Lab activities are individual projects only. You must fully complete the activity yourself.

Late assignment policy: On-time assignments must be turned into your TA at the time indicated on each assignment sheet. To turn in an assignment late you must submit the paper to your TA (PDF or Microsoft Word)

via email. Any assignment turned in late will lose 10 percentage points for each day that it is late, including the due date and weekends. That means that a paper turned in 2 days late will be marked down 20%.

Lab Discussion Questions: Prior to each lab meeting you have the option to submit questions that can contribute to the class discussions. There are 10 lab meetings. If you submit high quality questions each week that support discussion you will receive up to a 5% bonus to your final course grade. You may skip submitting questions for three lab meetings and still receive full bonus points. In other words, you submit 7 sets of questions out of a possible 10 lab meetings.

Grading: Your final grade will be based on the following course percentage points:

Requirement	% of final grade
Exam Scores	50%
Lab Discussion Questions (5)	5% (Bonus)
Lab Activity 1 – Survey	10%
Lab Activities 2 - 9	40%
Total	100%

The grading scale is as follows:

Percentage	Grade
89.50 - 100	4.0
84.50 - 89.49	3.5
79.50 - 84.49	3.0
74.50 - 79.49	2.5
69.50 - 74.49	2.0
64.50 - 69.49	1.5
59.50 - 64.49	1.0
0 - 59.49	0.0

Grade change policy: I will adhere to these cut-offs. At the end of the semester, if you believe that I made an error in calculating your grade, please let me know. I will check your grade, and I will change it if I have made an error. This is the only circumstance under which I will change a grade. Under no circumstance will I "bump up" your grade, or give you a special extra credit opportunity. I never do this, so please don't ask. There will be no exceptions.

Academic Honesty: Article 2.3.3 of the Academic Freedom Report states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Psychology Department adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations.

You are expected to develop original work for this course; therefore, unless authorized, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source (except as specified in the assignment). This also means that you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the www.allmsu.com website or similar websites to complete any course work in this course. In addition, plagiarism of written work is forbidden. It includes taking the work of another individual or source and presenting it as your own. This is considered plagiarism even if the source has given you permission to use their work, or the work is in the public domain (e.g., on the web). Any student who violates these rules will receive a penalty grade, possibly a failing grade on the assignment or in the course, and will be reported to the Office of Academic Affiars and the Office of Student Affairs. See also:

https://www.msu.edu/~ombud/academic-integrity/student-faq.html

Contact your instructor, or TA, if you are unsure about the appropriateness of your course work.

Consistent with MSU's efforts to enhance student learning, foster honesty, and maintain integrity in our academic processes, I have chosen to use a tool called Turnitin to compare your papers with multiple sources. The tool will compare each paper you submit to an extensive database of prior publications and papers, providing links to possible matches and a 'similarity score.' The tool does not determine whether plagiarism has occurred or not. Instead, I will make a complete assessment and judge the originality of your work. All submissions to this course will be checked using this tool.

Policy on Religious Observations: If you anticipate being absent from class due to a major religious observance, please provide notice of the date(s) to me, in writing, by the second class meeting.

Note taking and recording: You are encouraged to take notes on the lecture and are permitted to tape-record class sessions for your own purposes. However, you are not permitted to take notes or tape-record for purposes of sale and distribution.

E-Mail Policy: E-mail is the best way to get a hold of us (Dr. DeSjon and TAs). However, please use the following guidelines when e-mailing one of us:

- 1) First, ask yourself this question: "Can this question be answered by looking in the syllabus or looking on the D2L course site?"
- 2) Use PSY 395 in the subject line. That makes it clear you are a student in this course asking a question. This helps to prevent e-mails from going directly to the junk folder.
- 3) Please sign your e-mail with your full name, so we know who you are.
- 4) Check your e-mail regularly! During the course, we will e-mail you from time to time with announcements and reminders. Please read these e-mails as soon as you receive them, and please check your e-mail regularly.

Students with Special Needs: Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at rcpd.msu.edu. Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc.). Requests received after this date may not be honored.

If you require testing accommodations (additional time, less disruptive room, etc.) you must contact me and present your VISA at least two weeks before the exam date to schedule an alternative exam. Typically, I will schedule for you to take the exam during a special exam sessions offered by the Psychology Department. Those exams occur in small group settings and are offered every Wednesday at 3:00pm and Friday at 9:00am in Giltner 346. If you are unable to make either of those times, or that option does not meet your VISA accommodations, you may be able to schedule to take your exam at the RCPD office. In either case, the exam must be scheduled well in advance, so you need to adhere to the two week prior notification requirement.

Academic Assistance: This is a university and you are expected to produce college level work. If you have any trouble with assignments or the material covered in class, please make an appointment to speak with me. Additionally, the university has resources to assist students, such as the Campus Tutorial Center, the Campus Writing Center, Adult Student Services, and more. A lot is expected of you, but the university wants to help you to produce your best work.

Limits to Confidentiality: Please be aware that class mateirals are generally considered confidential pursuant to the University's student policies. However, all University employees, including instructors, cannot maintain confidentiality when it conflicts with their responsibility to report certain issues based on external legal obligations or health and safety considerations of MSU community members and others. As the instructor, I must

report the following information (including your name and the details of the disclosure) to the Office of Inclusion if you share it with me:

- Supsected child abuse, even if the maltreatment happened when you were a child
- Allegations of sexual assault or harassment when they involve MSU students, faculty, or staff
- Credible threats to harm of oneself or others

The Office of Inclusion will reach out to you via a confidential email, to see if you would like to pursue legal action and to provide you with additional university resources. You have the right to choose whether or not you would like to utilize any of these services or even respond to the university's email. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the MSU Counseling Center (http://counseling.msu.edu).

Disclaimer: As the instructor, I reserve the right to make any changes that I deem necessary to the details and/or policies listed in this syllabus. This includes adjusting the schedule according to the pace of the course and the needs of the students. Check D2L regularly to keep up with the topics. You will be given notice of any changes.

Course Schedule

Date	Lecture Topic	Morling Reading	
1/19	Intro to Course		
1/21	Psychological Science	Ch 1	
1/26	Ways of "knowing"	Ch 2	
1/28	Ways of "knowing"	Ch 3	
2/2	Research Ethics	Ch 4	
2/4	Basic Stats Review		
2/9	Basic Stats Review		
2/11	Exam 1		
2/16	Measurement	Ch 5	
2/18	Measurement	Ch 5	
2/23	Surveys	Ch 6	
2/25	Surveys	Ch 6	
3/4	Sampling	Ch 7	
3/9	Sampling	Ch 7	
3/11	Bivariate Correlational Research	Ch 8	
3/16	Multivariate Correlational Research	Ch 9	
3/18	Multivariate Correlational Research	Ch 9	
3/23	Exam 2		
3/25	Simple Experiments	Ch 10	
4/30	Simple Experiments	Ch 10	
4/1	Threats to Validity	Ch 11	
4/6	Complex Experimental Designs	Ch 12	
4/8	Complex Experimental Designs	Ch 12	
4/13	Quasi-Experiments & Small-N Designs	Ch 13	
4/15	Replication and Reproducibility	Ch 14	
4/20	Exam 3		
Apr 27, 2020	Final Exam	Via D2L: 3:00 – 5:00pm	

Lab Schedule

Dates	Lab	Торіс	Exercise
Week of 1/25		No Lab Session	
Week of 2/1	1	Lab Intro / Overview	Take the survey
Week of 2/8	2	Intro to JASP & Basic Statistics	
Week of 2/15	3	Hypothesis testing	Due: Basic Stats
Week of 2/22	4	Measurement	Due: Hypothesis Testing
Week of 3/8	5	Surveys	Due: Measurement & Agreement
Week of 3/15	6	Sampling	
Week of 3/22	7	Correlation	Due: Sampling
Week of 3/29	8	Regression	Due: Correlations
Week of 4/5	9	T-tests	Due: Regression
Week of 4/12	10	ANOVA	Due: T-tests
Week of 4/19		No Lab Session	Due: ANOVA

Assignments from the prior week are due at the beginning of your lab section.