Psychology 395 (Spring 2020) Research Design and Measurement in Psychological Research

Lectures: Tuesday & Thursday 9:10pm - 10:00am, 108 Bessey Hall

Labs: (times below), 012 Olds Hall

Instructor: Rick DeShon Office Hours: Tuesday 10:30-11:30am, Friday 11:30-12:30pm in Psychology 306 E-mail address: deshon@msu.edu

Text: You can use the most recent 2017 3rd edition or the 2014 2nd edition.

Morling, B. (2017). *Research methods in psychology: Evaluating a world of information* (3rd ed.), New York, NY: Norton.

Course Webpage: D2L (<u>https://d2l.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

Samantha Bowden (bowdensa@msu.edu) - Tuesday 2:45-3:45pm (or by appt.) in 309 Giltner.

Jessica Lee (leejes17@msu.edu) - Thursday 12:30pm-1:30pm (or by appt.) in Psychology 325

Linh Lazarus (lazarus6@msu.edu) - Wednesdays 10-11am (or by appt.) in Olds Hall 012

AJ Jagtap (jagtapab@msu.edu) - Wednesdays 3:00-4:00pm (or by appt.) in Psychology 325

Dominic Roberts (robe1140@msu.edu) - Monday 11am - 12pm (or by appt.) in Psychology 046

Undergraduate assistants (UA):

We have two Undergraduate Assistants for this course. Yay! They are fellow student who took this course in the past and performed very well. You can also direct questions about the course and lecture materials to them.

Heba Afaneh (afanehhe@msu.edu) - Wednesday from 12-2 pm at Espresso Royale

Kameryn Hamilton (hamil467@msu.edu) - Wednesday 10-11:30am (or by appt.) in 325 Psychology

Laboratory Sections: Labs begin meeting the week of January 20th. You must attend the lab section for which you are officially registered. They meet weekly in 012 Olds Hall. Here is the list of laboratory sections and TAs:

Section	Day	Time	ТА
1	Monday	8:00-9:50 am	Dominic
2	Monday	4:10-6:00 pm	Jessica
3	Tuesday	10:20am-12:10pm	AJ
4	Tuesday	4:10-6:00pm	Samantha
5	Wednesday	8:00-9:50am	Linh
6	Wednesday	12:40-2:30pm	Linh
7	Thursday	10:20am-12:10pm	Jessica
8	Thursday	4:10-6:00pm	Dominic
9	Friday 10:20am-12:10pm Samantha		Samantha
10	Friday 12:40pm-2:30pm AJ		AJ

Evaluation Criteria:

Exams: Five exams will be given in class – four REGULAR EXAMS taken during the scheduled lecture period, and one FINAL EXAM taken during the scheduled final exam period. The first four 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 three highest REGULAR EXAM scores and your FINAL EXAM score account for 40% 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 28 2020 3:00pm - 5:00pm** in 108 Ernst Bessey Hall. The final exam must be turned in by 5:00pm.

During exams, you will only be permitted to have pencils and erasers at your desk. Please leave refreshments or other materials zipped up in your book bag or do not bring them at all. Turn off all devices that make noise (e.g. cellular phones) and please do not wear hats. Once the exam has begun, there will be no talking or disruptions. Leaving the room is reserved for emergency bathroom breaks only. **You must bring identification.**

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 universitysanctioned 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 Attendance: Attendance will be taken during labs. You are permitted to miss 2 labs without losing points. Lab attendance will determine 5% of your course grade.

Lab Reports: There are 3 lab reports. The first two are each worth 5% of your course grade. The third is worth 10% of your course grade. In total, the lab reports account for 20% of your course grade. Each one must be uploaded to D2L **before the start of your lab the week they are due**. Lab work may be done in groups. Each student, however, must write-up and turn in an independent report.

Final Term Project: The final project in PSY 395 is worth 32.5% of your course grade. This project is broken down into multiple parts, and takes the form of an original group research project. Several of the laboratory sessions are devoted to explaining this project. Your TA will assign you to research teams of 3 to 4 students; however, written work must be completed independently. The project is broken down into the following parts:

Proposal Overview Form: Worth 2.5% of your course grade and one form turned in per team. This form will help your team organize and develop the research idea and study you are proposing. Your TA will provide comments and once the details are worked out this document will serve as your "contract" for your final term project. All research project topics **must** be approved by your TA.

Research Proposal: After your TA has given you an OK on your team project, each individual will write up this information in a formal research proposal that develops an empirical study, and you will conduct your designed study. The written research proposal is worth 10% of your course grade and serves two purposes. First, it will help you get started by writing the literature review and methods. Second, it will provide you with feedback that you can incorporate into your final research paper. Each student must turn in an individual written research proposal.

Final Research Paper: Each student will write a full APA-style research paper describing the empirical study completed. The final research paper is worth 15% of your course grade and each student must turn in an individual final project.

Final Research In-Lab Presentations: Additionally, each team will present their findings in-lab, which is worth 2.5% of your final grade and will allow for feedback before handing in the written project.

Team Participation: Finally, team participation is worth 5% of your final grade. Team members will grade each other on the extent to which each member helped develop and work on the final project.

Late assignment/paper policy: On-time assignments must be turned into the dropbox folder provided on D2L at the time indicated on each assignment sheet. To turn in an assignment late you must submit the paper to your TA (which must be able to be opened using 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%.

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

Requirement	% of final grade
Exam Scores	40%
Lab Attendance	5%
Lab Report 1	5%
Lab Report 2	5%
Lab Report 3	10%
Proposal Overview Form	2.5%
Written Research Proposal	10%
Final Research In-Lab Presentation	2.5%
Team Participation	5%
Final Research Paper	15%
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 <u>www.allmsu.com</u> 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.

Date	Lecture Topic	Readings	
Jan 7, 2020	Intro to Course		
Jan 9, 2020	What is Psychology	Morling—Chapter 1	
Jan 14, 2020	Ethics	Morling – Chapter 4	
Jan 16, 2020	Ethics/Basic Ingredients of a Study	Morling – Start of Chapters 3 & 5 (p. 55-59 & p. 121 – 128)	
Jan 21, 2020	Basic ingredients of a study/Basic Stats Review	Morling – Statistics Review (p. 441 – 486)	
Jan 23, 2020	Basic Stats Review	Morling – Statistics Review (p. 441 – 486)	
Jan 28, 2020	Scientific Inquiry	Morling – Chapter 2	
Jan 30, 2020	Scientific Inquiry	Morling – Chapter 2	
Feb 4, 2020	Exam 1		
Feb 6, 2020	Replication and Reproducibility	Morling – Chapter 14 Nosek, Spies, and Motyl (2012) Required: pp. 615-619	
Feb 11, 2020	Measurement	Morling – Chapter 3	
Feb 13, 2020	Measurement	Morling – Chapter 5	
Feb 18, 2020	Measurement	Morling – Chapter 5	
Feb 20, 2020	Sampling	Morling – Chapter 7	
Feb 25, 2020	Sampling	Morling – Chapter 6	
Feb 27, 2020	Exam	2	
Mar 3, 2020	SPRING BREAK		
Mar 5, 2020	SPRING BREAK		
Mar 10, 2020	Survey Research	Morling – Chapter 6	
Mar 12, 2020	Experimental Research	Morling – Chapter 10	
Mar 17, 2020	Experimental Research	Morling – Chapter 11	
Mar 19, 2020	Experimental Research	Morling – Chapter 11	
Mar 24, 2020	NO CLASS 7	ΓΟΔΑΥ	
Mar 26, 2020	Correlational Research	Morling – Chapter 8	
Mar 31, 2020	Exam	Exam 3	
Apr 2, 2020	Correlational Research	Morling Chapter 9	
Apr 7, 2020	Correlational Research	Morling – Chapter 9	
Apr 9, 2020	Complex Experimental Designs	Morling – Chapter 12	
Apr 14, 2020	Complex Experimental Designs	Morling – Chapter 12	
Apr 16, 2020	Special topic in research methods or catch-up		
Apr 21, 2020	Exam 4		
Apr 23, 2020	Review session for final exam		
Apr 28, 2020	Final Exam	108 Bessey Hall 3:00 – 5:00pm	

Lab Schedule

Dates	Lab	Торіс	Exercise	
Week of 1/20	1	Observational Study	Lab Report 1 handed out	
Week of 1/27	2	Analysis of Observational Study		
Week of 2/3	3	Data Collection for Lab Report 2 & 3	Lab Report 1 Due by the start of assigned lab time / Lab Report 2 handed out	
Week of 2/10	4	Writing a Method section / Analysis of Data for Lab Report 2		
Week of 2/17	5	Writing an Introduction / Setting up the Data for Lab Report 3	Lab Report 2 Due by the start of assigned lab time / Lab Report 3 handed out	
Week of 2/24	6	Analysis of Data for Lab Report 3	Proposal Overview Form handed out	
Week of 3/6		NO LAB-SPRING BREAK		
Week of 3/9	7	Work on Final Project	Lab Report 3 Due by the start of assigned lab time	
Week of 3/16	8	Work on Final Project	Proposal Overview Form Due by the start of assigned lab time	
Week of 3/23	9	TA Feedback / Prep for Data Collection		
Week of 3/30	10	Work on Final Project and Presentation / Data Collection	Written Research Proposal Due by the start of assigned lab time	
Week of 4/6	11	Presentation Prep / Data Collection		
Week of 4/13	12	Final Research Presentations	In-Lab Presentations	
Week of 4/20		No lab—Final Research Paper	due 4/22/20 by 5pm	