# PSY 395: Research Design and Measurement in Psychological Research

Fall 2019: Tuesday & Thursday 9:10am – 10:00am, B119 Wells Hall Lab (see below for times), 012 Olds Hall 3.0 Credit Hours

## **Part 1: Course Information**

#### **Instructor Information**

Instructor: Dr. Jennifer Watling Neal Office: 242 Psychology Building

Office Hours: Thursdays 10:30-12:30pm or by appointment

E-mail: <u>ineal@msu.edu</u>

#### **Textbook & Course Materials**

There is one required textbook for this course:

Dixon, J.C., Singleton, R.A., & Straits, B.C. (2018). *The process of social research* (2nd edition). New York: Oxford University Press.

## **Course Webpage**

The course webpage is located on D2L (<a href="https://d2l.msu.edu/">https://d2l.msu.edu/</a>). On this page, you'll find important course information including materials from class lectures and grades.

## **Course Description & Objectives**

Welcome to Psychology 395! This course is designed to build your skills in the various steps that it takes to conduct a research project in psychology. There are 5 main objectives that will be accomplished through a series of class lectures, labs, and assignments. This course will help you:

- 1. Learn to develop research questions and generate hypotheses
- 2. Understand the principles of measurement necessary to conceptualize and operationalize key psychological phenomena
- 3. Learn about different ways to collect data to examine your research questions and hypotheses
- 4. Select, perform, and interpret statistical analyses to test your hypotheses
- 5. Effectively communicate your results through scientific presentation and writing

By accomplishing these objectives, you will not only learn how to produce psychological research but will also learn how to be a savvy consumer of psychological research.

#### **Prerequisite**

Because PSY 395 is a research methods class, it will involve applying statistics that you learned about in PSY 295 such as correlations, t-tests, ANOVAs, and/or basic regression. Don't worry! We'll be reviewing these statistical tests in class and in labs. However, if it's been awhile since you have taken statistics, you'll likely benefit from

reviewing this material. If you have any specific concerns about your understanding of the material from PSY 295, please don't hesitate to contact your TA or me.

## **Laboratory Sections**

<u>Labs begin meeting the week of September 3<sup>rd</sup> (Please note: Monday lab sections will not meet on 9/2 due to Labor Day).</u> 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 of the Week	Time	TA Info
1	Monday	10:20 – 12:10pm	Lucas Al-Zoughbi alzoughb@msu.edu Office Hour: 9-10am Mondays Giltner 349
2	Monday	4:10 – 6:00pm	Lucas Al-Zoughbi alzoughb@msu.edu Office Hour: 9-10am Mondays Giltner 349
3	Wednesday	12:40 – 2:30pm	Brian Brutzman brutzman@msu.edu Office Hour: 4-5pm Tuesdays Psychology 244B
4	Tuesday	4:10 – 6:00pm	Samantha Bowden bowdensa@msu.edu Office Hour: 2-3pm Fridays Office TBD
5	Thursday	4:10 – 6:00pm	Henry Yang yangsan2@msu.edu Office Hour: 4-5pm Fridays Office TBD
6	Thursday	12:40 – 2:30pm	Henry Yang yangsan2@msu.edu Office Hour: 4-5pm Fridays Office TBD
7	Friday	10:20 – 12:10pm	Samantha Bowden bowdensa@msu.edu Office Hour: 2-3pm Fridays Office TBD
8	Friday	12:40 – 2:30pm	Hyeyoung Yoon yoonhye0@msu.edu Office Hour: 11-12pm Fridays Psychology 320

# Part 2: Course Activities and Grading

## Grading

There are **500 points** available to earn in this class. The breakdown of course points and % of final grade by activity are provided below:

Activity	Points	% of Final Grade
Top 4 (out of 5) Exams	50 points each (200 total points)	40%
Final Survey Paper	125 points	25%
4 Assignments	25 points each (100 total points)	20%
In-Lab Group Presentation	50 points	10%
Lab Attendance (up to 10 labs)	2.5 points each (25 total points)	5%
Total	500 points	100%
Extra Credit	up to 10 points	up to 2%

Your final grade will be based on the number of points you have earned on course activities:

Grade	Points
4.0	450 – 500 points
3.5	425 – 449.9 points
3.0	400 – 424.9 points
2.5	375 – 399.9 points
2.0	350 – 374.9 points
1.5	325 – 349.9 points
1.0	300 – 324.9 points
0.0	Less than 300 points

<u>I will adhere strictly to these cut-offs for grades.</u> Extra credit is the only way to increase your point total if you are concerned about falling on the wrong side on one of 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.

#### **Course Activities**

**Exams.** Five exams will be given in class – four during the regularly scheduled class period, and one during the final exam period. The first four exams emphasize material covered since the previous exam (in lecture and lab); however, the material in this class is more or less cumulative because concepts from the first portions of the class are always relevant. The final exam is cumulative. Each exam will include multiple-choice and/or true/false questions. Your four best exam scores will account for 40% of your final

grade. Your lowest exam score will be dropped. For instance, if you do well on the first four exams, your grade on the cumulative final exam will not matter. Or, if you do poorly on one of the first four exams, you can take the final exam to make up for it.

<u>Makeup Exams:</u> If you miss an exam for any reason, this will be the exam that is dropped from your final grade. If you miss a second exam, you can take a makeup exam <u>only</u> if 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 \_\_\_\_\_\_." Simply having a bad cold is not an acceptable excuse. The note cannot come from someone in your family. 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 me **at least two weeks in advance of the 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.

Exams 1 - 4 will begin promptly at 9:10am. The Final Exam will begin at promptly at 10:00am. You may arrive late, but no more exams will be handed out after the first student completes the exam. Exams 1 - 4 must be turned in by 10:00am. The Final Exam must be turned in by 9:45am. During exams, you may have one 8.5 X 11-inch piece of paper with your own handwritten notes for reference. These must be your own original notes and you will hand them in at the end of the exam. You can also have pencils and erasers at your desk. Leave refreshments or other materials zipped up in your book bag or do not bring them at all. Turn off anything that makes noise 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.

Final Survey Paper. To help you get hands-on experience with the process of engaging in research in psychology from start to finish, you'll be conducting an original survey research project. Don't worry! To make the survey project manageable, you'll be working collaboratively in research teams with 3 to 4 other members of your lab. Several lab sessions are devoted to this larger project and there are several smaller assignments that are the building blocks for this larger assignment. These assignments will allow you to gain and incorporate feedback on these building blocks before you turn in your final survey paper. Please note: Although you'll be working in teams to develop elements of your survey, your final survey paper must be completed independently and should reflect your own, original work.

This paper will involve writing a full APA-style research paper that describes your survey research project. As part of this paper, you will include a rationale for your study, hypothesis, a method section, a results section, and a discussion that includes an interpretation of your results and the limitations of your study. A detailed rubric will be provided on D2L so that you know exactly what elements to include in the final project. This final survey paper is worth 25% of your grade.

**Assignments.** There are several course assignments designed to help you learn how to design and conduct a psychological research study. Each assignment is worth 5% of your grade. These assignments include the following:

- Assignment 1 Consuming Research: You will write a brief paper (up to 2 pages) summarizing a news article that describes a psychological study (see rubric for more details)
- 2. Assignment 2 Project Rationale and Hypothesis: You will write a project rationale (up to 3 pages) outlining the study constructs you will be examining in your survey project along with their hypothesized associations. Additionally, you'll provide a theoretical rationale for these associations (see rubric for more details).
- 3. Assignment 3 Survey Participation: As part of the class, you'll complete our class survey. Your anonymized data will be provided to members of the class to analyze as part of their final survey papers and may be used in future research (more details provided in lecture and lab). If you do not wish to participate in the survey, there is an alternative 2-page paper on survey design that you can write instead.
- **4. Assignment 4 Method Section:** You will write a method section (up to 3 pages) describing the sample, procedures, measures, and analytic strategy for your survey project (see rubric for more details).

For all assignments that involve writing or presenting results, a more detailed assignment sheet and grading rubric will be provided on D2L. By carefully reviewing and following these rubrics, you can increase your probability of success in the course. Please note: Although you'll be working in teams to develop these assignments, all written assignments must be completed independently and should reflect your own, original work.

*In-Lab Group Presentation*. Each lab team will present findings from their final survey project in-lab during Week 15. Evaluation of the group presentations will focus on how well your group communicates the major components of your project (i.e., rationale, hypotheses, methods, results, discussion) to the rest of your lab. Team members will also rate each other on the extent to which each member helped develop and work on the final presentations and this will be factored into your grade. These presentations are worth 10% of your grade.

**Lab Attendance**. Attendance will be taken during labs and will count for 5% of your grade. **You will receive 2.5 points per lab that you attend for up to 10 labs during the semester**. Because there are more than 10 labs during the semester, you can miss 1 or 2 labs without losing points.

**Extra Credit.** You may accumulate up to 10 extra credit points by participating in ongoing research in the Psychology department. All such participation will be through the Department of Psychology's SONA program. Here is the link for signing up for studies: <a href="https://msu-psychology.sona-systems.com/">https://msu-psychology.sona-systems.com/</a>. Make sure you use this link!! The Comm Arts Department also uses SOnA and you want to make sure you sign up with Psychology, not them! You will receive a credit for each hour that you spend participating in an experiment.

Each credit you earn is worth 2 extra-credit points in this class, up to a maximum of 10 points (5 SONA credits). **The last day to participate in experiments is Friday, December 6th, 2019**. Details on how to sign up for experiments are posted on the D2L

page. For all questions about research participation, please do not contact me. Instead, contact Ms. Audra Jeffrey (jeffre22@msu.edu).

As an alternative to research participation, you may also receive extra credit by writing a thought paper that I have designed for this situation. If you prefer this option, you must make arrangements with me by Tuesday, October 15th, 2019, and I will give you the specifics of the paper. If you have not made arrangements by Tuesday, November 5th this will no longer be an option for receiving extra credit.

## **Lecture Participation**

Although you will receive points for attending labs in this class, I will not take attendance in lectures. However, I will be presenting materials in lectures that will be important for your success on class assignments, your survey project, and the exams. Therefore, if you want to do well in class, it is in your best interest to regularly attend lectures!

## Lecture Notes, Note Taking, and Recording

After class I will post PDF slides from my lectures on D2L. **However**, I make no guarantees that the posted slides will cover everything that comes up in my lectures. Having access to slides doesn't mean that you should skip lectures (see above). Attending lectures will help reinforce course content that you need to understand to do well on assignments, your survey project, and the exams.

Additionally, you are encouraged to take notes on the lecture and are permitted to taperecord class sessions for your own purposes. However, you are not permitted to take notes, tape-record, or use any provided course materials (including course slides) for purposes of sale and distribution.

#### **Classroom Climate**

I'm looking forward to working with each of you this semester! To make the class lectures and labs conducive to learning, please make sure to:

- 1. **Arrive on time to lectures and labs.** I know our lecture is early in the morning, but arriving on time will make sure you don't miss important information
- 2. **Minimize distracting behaviors.** Turn off your cell phones or other devices that might make noise. Refrain from having side conversations with your classmates. Avoid engaging in other distracting behaviors (e.g., having food delivered, leaving in the middle of class, etc.).
- 3. **Ask questions.** If you don't understand something in lecture or lab, chances are your classmates don't either! Asking questions enriches everyone's learning experience.
- 4. **Be respectful to others.** This includes your classmates, TAs, and me!

## **Late Work Policy**

Assignments must be turned into the appropriate folder provided on D2L (under Assessments – Assignments) at the time indicated on the syllabus. Note: If an assignment is listed as due in lab on the syllabus, it means it is due by the start of your assigned lab section during that week. If an assignment is listed as due in lecture, it means it is due by the start of lecture on that day (i.e., 9:10am). No late assignments or projects will be accepted!

## E-mail Policy

E-mail is the best way to get a hold of both Dr. Neal and your TA. 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) Ask or email your TA or me. Use PSY 395 in the subject line. That makes it clear you are a student in this course asking a question. This also 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.

#### **Academic Honesty**

Article 2.III.B.2 of the SRR states: "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 specified in General Student Regulation 1.0, <u>Protection of Scholarship and Grades</u>; the all-University Policy on <u>Integrity of Scholarship and Grades</u>; and <u>Ordinance 17.00</u>, 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 Web site 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 Affairs and the Office of Student Affairs. See also: <a href="https://www.msu.edu/~ombud/academic-integrity/student-faq.html">https://www.msu.edu/~ombud/academic-integrity/student-faq.html</a>
Contact me or your TA if you are unsure about the appropriateness of your course work.

#### **Accommodations for Students with Disabilities**

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 <a href="rcpd.msu.edu">rcpd.msu.edu</a>. 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 without sufficient lead time will 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 session offered by the Psychology Department. Those exams occur in small group settings and are offered every Monday and Wednesday at 3:00pm 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 or your TA as soon as possible. We'd like to see you succeed in class and can work to help find solutions when you are having difficulties with the course materials! 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 materials are generally considered confidential pursuant to the University's student record 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 to protect the health and safety of MSU community members and others. As the instructors, the TAs and I must report the following information to other University offices (including the Office of Inclusion and Department of Police and Public Safety) if you share it with one of us:

- Suspected child abuse/neglect, even if this maltreatment happened when you were a child,
- Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and
- Credible threats of harm to oneself or to 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 (https://counseling.msu.edu).

#### **Turnitin**

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 may be checked using this tool.

You should submit papers to Turnitin Dropboxes **without identifying information included in the paper** (e.g., name or student number), the Desire 2 Learn system will automatically show this information to me when I view the submission, but the information will not be retained by Turnitin. If you forget and submit your paper with your identifying information on it, it will be retained in the Turnitin repository.

**All submissions to this course will be checked using Turnitin.** In choosing to use Turnitin in our class, I have agreed to follow five guidelines. They are:

- 1. I will use Turnitin as part of a balanced approach to encourage academic integrity and foster student success.
- 2. I will openly disclose use of Turnitin in this course on the syllabus and at the time assignments are announced.
- 3. For a given assignment, I will use Turnitin for all papers.
- 4. I will make the final determination of originality and integrity.
- 5. To ensure privacy, I will ask students to remove identification (e.g., names and student numbers) from submissions.

If you have any questions about the use of Turnitin in this course, please bring them to my attention.

## **Drops and Adds**

The last day to add this course is 9/4/19. The last day to drop this course with a 100 percent refund and no grade reported is 9/23/19. The last day to drop this course with no refund and no grade reported is 10/16/19. You should immediately make a copy of your amended schedule to verify you have added or dropped this course.

## Part 4: PSY 395 Course Schedule for Fall 2019

**Disclaimer:** On the following pages you will find a tentative schedule of when we will cover the topics in lecture and lab. However, as the instructor, I reserve the right to adjust this schedule according to the pace of the course and student needs. This also includes making any changes that I deem necessary to the details and/or policies listed in this syllabus. **Check D2L regularly to keep up with the topics and for notices of any changes.** 

Week	Date	Topic	Readings
Week 1	Thursday 8/29	Introduction	Syllabus
Week 2	Tuesday 9/3	Why Research Methods?	Chapter 1
Week 2	Thursday 9/5	Scientific Reasoning Guest Lecture: <b>Dr. Zachary Neal</b>	Chapter 2
Week 2	Lab	TA Intro/Defining Research	
Week 3	Tuesday 9/10	Scientific Reasoning	Chapter 2
Week 3	Thursday 9/12	Research Design	Chapter 4
Week 3	Lab	Consuming Research Assignment #1 DUE	
Week 4	Tuesday 9/17	Research Design	Chapter 4
Week 4	Thursday 9/19	Midterm Exam #1	
Week 4	Lab	Hypothesis Poker	
Week 5	Tuesday 9/24	Measurement	Chapter 5
Week 5	Thursday 9/26	Measurement	Chapter 5
Week 5	Lab	Generating Hypotheses & Writing Rationale	
Week 6	Tuesday 10/1	Sampling	Chapter 6
Week 6	Thursday 10/3	Sampling	Chapter 6
Week 6	Lab	Writing Survey Questions Survey ? DUE at end of lab	
Week 7	Tuesday 10/8	Surveys	Chapter 8
Week 7	Thursday 10/10	Surveys	Chapter 8
Week 7	Lab	Survey Design Assignment #2 DUE	

Week	Date	Topic	Readings
Week 8	Tuesday 10/15	Midterm Exam #2	
Week 8	Thursday 10/17	Experiments Assignment #3 DUE by start of lecture	Chapter 7
Week 8	Lab	In-Lab Experiment	
Week 9	Tuesday 10/22	Experiments	Chapter 7
Week 9	Thursday 10/24	Field Research	Chapter 9
Week 9	Lab	Writing Methods	
Week 10	Tuesday 10/29	Field Research	Chapter 9
Week 10	Thursday 10/31	Midterm Exam #3	
Week 10	Lab	Observation Activity	
Week 11	Tuesday 11/5	Quantitative Analysis	Chapter 12
Week 11	Thursday 11/7	Quantitative Analysis	Chapter 12
Week 11	Lab	Stats Workshop Assignment #4 DUE	
Week 12	Tuesday 11/12	Quantitative Analysis	Chapter 12
Week 12	Thursday 11/14	Communicating Results	Chapter 14
Week 12	Lab	Writing Results	
Week 13	Tuesday 11/19	Communicating Results	Chapter 14
Week 13	Thursday 11/21	Ethics	Chapter 3
Week 13	Lab	Final Write-Up Q&A	
Week 14	Tuesday 11/26	Ethics Final Survey Project DUE	Chapter 3
Week 14	Thursday 11/28	No Class -Thanksgiving	
Week 14	Lab	No Labs This Week	
Week 15	Tuesday 12/3	Midterm Exam #4	
Week 15	Thursday 12/5	Final Exam Review	

Week	Date	Topic	Readings
Week 15	Lab	Group Presentations	
Finals	Tuesday 12/10	Final Exam (10:00-12:00pm in B119 Wells)	