PSY 395: Research Design and Measurement

in Psychological Research

**Summer Session I, 2021:**

**Lecture: Asynchronous Online Video**

**Lab: Asynchronous Online Video**

**3.0 Credit Hours**

## Part 1: Course Information

### Instructor Information

Instructor: Ben Fry, M.A.

Office Hours: Tuesdays 11:00am – 12:00pm via Zoom or by appointment

E-mail: [frybenj1@msu.edu](mailto:frybenj1@msu.edu)

### Textbook & Course Materials

There is one required textbook for this course, available online (link on D2L) for $10:

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

### Course Webpage

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

### Statistical Software

JASP Statistics will be utilized for statistical analysis. It is a free and easy-to-use tool that can be downloaded at [https://jasp-stats.org/.](https://jasp-stats.org/)

### 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. By the end of this course, you will be able to:

1. Develop research questions and generate hypotheses
2. Understand the principles of measurement necessary to conceptualize and operationalize key psychological phenomena
3. Understand 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. We will be reviewing these statistical tests in class lectures and in labs. If unsure about these methods, you will likely benefit from reviewing this material. If you have any specific concerns about your understanding of the material from PSY 295, please do not hesitate to contact me.

## 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** |
| 1 Regular Exam | 120 points | 24% |
| 1 Final Exam | 120 points | 24% |
| Final Paper | 150 points | 30% |
| 2 Paper Assignments | 55 points each (110 total points) | 22% |
| **Total** | **500 points** | **100%** |

**Due Dates**

As this is an asynchronous course, I am happy to allow students to work ahead at their own pace. This means you can take an exam or turn in an assignment at **any time before the due date**. Hard cutoffs for turning in course exams and assignments are listed below.

|  |  |
| --- | --- |
| **Activity** | **Due Date** |
| Assignment 1 | 6/3/21 @ 11:59pm EDT |
| Exam 1 | 6/7/21 @ 11:59pm EDT |
| Assignment 2 | 6/17/21 @ 11:59pm EDT |
| Final Paper | 6/29/21 @ 11:59pm EDT |
| Final Exam | 7/1/21 @ 11:59pm EDT |

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 |

**I will adhere strictly to these cut-offs for grades.**

***Exams:*** Two exams will be given – one at roughly the midway point in Summer Session I, (6/7), and one final on the last day of class (7/1). Both exams will be administered asynchronously online via D2L and can be taken at any time before the due date. **Exam 1 covers the lecture and lab material for weeks 1-3**, and the **final exam will cover the lecture and lab material for weeks 4-7**. The final exam WILL NOT BE CUMULATIVE. Each exam will account for 24% of your final grade. Each exam will include multiple-choice and/or true/false questions. Students who require additional testing time should have their RCPD VISAs to me at least two weeks before the first test is administered so that accommodations can be made.

**Makeup Exams:** If you are unable to take one of the two exams by the days/times they are due virtually, **let me know at least 2 weeks in advance** and alternative arrangements will be made, if appropriate. I understand that we are dealing with unusual circumstances and I will strive to be flexible so that students can maximize their chances of success. Please note that the final exam day is due by the last day of class and is mandated by the university, so I will be unable to offer it at a later date.

***Final Paper.*** To help you get experience with the process of engaging in psychological research from start to finish, you will be conducting a final research project. I would encourage those of you who feel comfortable to form groups for discussing ideas and working through research activities together. **Please note: If you choose to form a research group, your smaller paper assignments and final survey paper must still be completed independently and should reflect your own, original work.**

This project will involve writing a full APA-style research paper that describes your 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 30% of your grade.

While this is not a composition course, you are still expected to produce **college-level** **writing**. If you struggle with writing and/or APA style, I strongly encourage you to schedule time to go over your paper with the writing center <https://writing.msu.edu/> —submissions found to be lacking in grammar, spelling, and clarity will be graded as such.

***Assignments.*** There are two course assignments designed to help you learn how to design and conduct a psychological research study. Each assignment is worth 11% of your grade. Note: If I find your first written assignment submission to be beneath the level of writing competency expected in this course, **you will be required to schedule a consult with the writing center** before turning in your next document. These assignments include the following:

1. **Assignment 1 – 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).
2. **Assignment 2 – 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, 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.**

### Late Work Policy

Assignments must be turned into the appropriate folder provided on D2L (under Assessments – Assignments) at the time indicated on the syllabus. **Penalties for late assignments or projects will be deducted (5 points for the first day late and 2 points for every additional day late). If you have an issue with getting an assignment in on time, let me know at least a week in advance so that accommodations can be made, if appropriate. Assignment extensions will only be granted in the case of a documented family/medical emergency or observance of religious holiday.**

### E-mail Policy

E-mail is the best way to get in touch with me. However, please use the following guidelines when e-mailing:

1) If unable to find the answer yourself on the course D2L page or syllabus, please email me or send me a message on D2L. Please use PSY 395 in the subject line.

2) Please sign your e-mail with your full name, so I know who you are.

3) Check your e-mail regularly! During the course, I will e-mail you OFTEN 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](http://splife.studentlife.msu.edu/academic-freedom-for-students-at-michigan-state-university/article-2-academic-rights-and-responsibilities) of the Student Rights and Responsibilities 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, [Protection of Scholarship and Grades](http://splife.studentlife.msu.edu/regulations/general-student-regulations); the all-University Policy on [Integrity of Scholarship and Grades](http://www.reg.msu.edu/AcademicPrograms/Print.asp?Section=534); and [Ordinance 17.00](http://splife.studentlife.msu.edu/regulations/student-group-regulations-administrative-rulings-all-university-policies-and-selected-ordinances/examinations-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 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 be penalized in accordance with the severity of the offense, including the possibility of receiving a failing grade. Such offenses will be reported to the Office of Academic Affairs and the Office of Student Affairs.** See also: <https://www.msu.edu/~ombud/academic-integrity/student-faq.html>

Contact me 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 [rcpd.msu.edu](http://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 without sufficient lead time will not be honored.

**If you require testing accommodations (additional time, 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 time that is mutually convenient. If you are unable to make any 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.

### Student Athletes

Student athletes should make the instructor aware of any schedule conflicts as soon as possible, preferably at the outset of the semester, so that appropriate accommodations can be made.

### Policy on Religious Observance

The policy of Michigan State University is as follows: It has always been the policy of the University to permit students and faculty to observe those holidays set aside by their chosen religious faith. The faculty and staff should be sensitive to the observance of these holidays so that students who absent themselves from classes on these days are not seriously disadvantaged. It is the responsibility of those students who wish to be absent to make arrangements in advance with their instructors.

### Academic Assistance

The production of college level work is expected. If you have any trouble with assignments or the material covered in class, please make an appointment to speak with me 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.

### 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.

## Part 4: PSY 395 Course Schedule for Summer Session I, 2021

| ***Week*** | ***Date*** | ***Topic*** | ***Readings*** |
| --- | --- | --- | --- |
| Week 1 Lecture | 5/17 – 5/21 | Introduction  Scientific Reasoning | Chapters 1 and 2 |
| Week 1  Lab | 5/17 – 5/21 | 1st in Person/Class Objectives  JASP Stat Tutorial | Syllabus |
| Week 2  Lecture | 5/24 – 5/28 | Ethics in Psychological Research  Basic Statistics | Chapter 4  Morling p.457-504 |
| Week 2  Lab | 5/24 – 5/28 | JASP Datasets & Form Hypotheses  Descriptive & Inferential Stats w/JASP |  |
| Week 3  Lecture | 5/31 – 6/4 | Measurement | Chapter 5 |
| Week 3  Lab | 5/31 – 6/4 | **Assignment #1 DUE**  Exam Review |  |
| Week 4  Exam | 6/7 | **Exam #1 (Lecture weeks 1-3)** |  |
| Week 4  Lecture | 6/7 – 6/11 | Surveys | Chapter 6 |
| Week 4  Lab | 6/7 – 6/11 | Writing Survey Questions  Writing Methods |  |
| Week 5  Lecture | 6/14 – 6/18 | Sampling  Experiments | Chapter 7  Chapters 10-12 |
| Week 5  Lab | 6/14 – 6/18 | Strategies for Data Analysis  Student Data Analysis  **Assignment #2 DUE** |  |
| Week 6  Lecture | 6/21 – 6/25 | Correlational Research  Quasi-Experimental Research | Chapters 8 and 9  Chapter 13 |
| Week 6  Lab | 6/21 – 6/25 | Writing Results  Final Exam Review |  |
| Week 7  Lecture | 6/28 – 7/1 | Wrap up any outstanding material |  |
| Week 7  Lab | 6/28 – 7/1 | **FINAL PROJECT DUE** |  |
| Week 7 | 7/1 | **FINAL EXAM** **DUE BY 11:59pm EDT** |  |