**PSY 395: Research Design and Measurement in Psychological Research**

**Summer 2021, Session II**

**Lecture: Asynchronous Online Video**

**Lab: Asynchronous Online Video**

**3.0 Credit Hours**

**Instructor Information**

|  |  |
| --- | --- |
| **Instructor:** Darwin A. Guevarra | **Email:** guevarr3@msu.edu |
| **Office Hours:**   * Monday: 1:00 – 2:00 pm * Tuesday – Friday: 3:00 – 4:00 pm * By Appointment | **Office Hours Location:**   * Zoom: [Link](https://msuhipaa.zoom.us/j/4931317523) * Zoom ID: 493 131 7523 * Coffee shop: My Choice! |

**Course Description**

**Objectives**

For the next seven weeks, you are all burgeoning psychology researchers. This course is designed to provide students with practical training in developing necessary skills in conducting research in psychology. Five Main Objectives will be accomplished through a series of class lectures, labs, and assignments. By the end of the course, you will be able to:

1. Ask 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

By accomplishing these objectives, you will learn:

* How to produce psychological research
* How to effectively consume psychological science (it should also transfer to another scientific research)

**Prerequisite**

PSY 395 is a research methods class; it will involve applying statistics 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 studying this material. If you have any specific concerns about your understanding of the material from PSY 295, please do not hesitate to contact me.

**Textbook and Course materials**

**Textbook**

One required textbook for this course is 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 in D2L (INSERT LINK)

**Statistical Software**

We will use JASP Statistics software to conduct all our analyses. It is free and easy to use. It can be downloaded at <https://jasp-stats.org/>.

**Course activities and grading**

**Grading**

There are 500 points available to earn in this class (which seems like a good number). Here is the breakdown of course points and % of the final grade by activity.

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Points** | **% of Final Grade** | **Due Dates (all in EDT)** |
| Meet-and-greet | 25 | 5% | 7/29/2021 at 6:00 pm |
| Posting and discussions | 25 | 5% | 8/16/2021 at 11:59 pm |
| Exam 1 | 100 | 20% | 7/26/2021 at 11:59 pm |
| Exam 2 | 100 | 20% | 8/19/2021 at 11:59 pm |
| Writing Assignment 1 | 50 | 10% | 7/19/2021 at 11:59 pm |
| Writing Assignment 2 | 50 | 10% | 8/2/2021 at 11:59 pm |
| Final Writing Assignment | 150 | 30% | 8/19/2021 at 11:59 pm |
| **Total** | **500** | **100%** |  |

**Course Activities Description**

* **Meet-and-greet (5%):** I find that the class is more enjoyable if I get to know all of you. This is a small class that allows me to do that. The easiest 5% of your grade you will ever have to do. As part of your grade, you will meet with me briefly (5-10 mins) during office hours or an appointed time to talk about anything you want from class assignments, research, or future career goals! We will also finalize your research team during this meeting. You will have to do this before Writing Assignment 1 is due. Otherwise, you will lose your points.
  + **Due Date:** July 29, 2021 (Monday) before 6:00 pm EDT
* **Posting and discussions (5%):** Science is inherently a team endeavor. #TeamScience. Part of that team philosophy is engaging with other scientists. It will be difficult given that the class is asynchronous, but I want to test if making a posting on discussion boards as part of your grade will help facilitate discussions. As such, you will be required to post a minimum of **FIVE** postings throughout the semester. I want you to talk to each other. These posts can include an "Introduce Yourself" component, research questions, questions about the writing assignments, posts about research findings you thought were interesting, replies to other posts, etc. I just want you to discuss.
  + **Due Date:** August 16, 2021 (Monday) at 11:59 pm EDT
* **Exam 1 (20%):** Exam 1 will be administered at roughly the midway point. Exam 1 will be administered asynchronously online via D2L and taken any time before the due date. Exam 1 will cover the lecture and lab materials for weeks 1 through 3. Students who require additional testing time should have their RCPD VISAs to me at least two weeks before the first test is administered to make accommodations.
  + **Due Date:** July 26, 2021 (Monday) at 11:59 pm EDT
* **Exam 2 (20%):** Exam 2 will be administered during the last day of class. Exam 2 will be administered asynchronously online via D2L and taken any time before the due date. Exam 2 will cover the lecture and lab materials for weeks 4 through 7. Students who require additional testing time should have their RCPD VISAs to me at least two weeks before the first test is administered to make accommodations.
  + **Due Date:** August 19, 2021 (Thursday) at 11:59 pm EDT
* **Writing Assignment 1 (10%):** Project Rationale and Hypothesis
  + IMPORTANT. I HAVE TO APPROVE YOUR RESEARCH PROJECT.
  + Again, science is a team endeavor. The writings are designed to mimic the publication process in which scientists typically work in teams. Therefore, you will be working in a team of 2 or 3 on your writing assignments. If you really want to work by yourself, please talk to me during office hours.
  + You will write a project rationale (up to 3 pages) outlining the study constructs you will be examining in your paper. You will also provide your hypothesis and theoretical rationale for them (see rubric for more details).
  + Since you will be working in teams, some of your words will be very similar to each other. This is okay. I will just require you to submit your own work.
  + **Due Date:** July 19, 2021 (Monday) at 11:59 pm EDT
* **Writing Assignment 2 (10%):** Method Section
  + The same stipulations from Writing Assignment 1 apply
  + 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).
  + **Due Date:** August 2, 2021 (Monday) at 11:59 pm EDT
* **Final Writing Assignment (30%):**
  + The same stipulations from Writing Assignment 1 and 2 apply
  + This final paper will involve writing a full APA-style research manuscript that describes your project.
  + As part of this paper, you will include a rationale for your study, hypotheses, a method section, a results section, and a discussion that includes an interpretation of your results and limitations of your study.
  + A detailed rubric will be provided in D2L so that you know exactly what elements to include in your final paper.
  + **Due Date:** August 19, 2021 (Thursday) at 11:59 pm EDT

**Course Policies**

**Email Policy**

* Email is the best way to get in touch with me.
* Here are some guidelines
  + Use PSY 395 and your full name in the headline. It makes it easier for me to search for your email. Example "PSY 395 Darwin Guevarra"
  + Please sign your email with your full name.
  + Check your email regularly. During the course, I will email you OFTEN with announcements and reminders. Please read these emails as soon as you receive them, and please check your email regularly.

**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 every day it is late). If you have an issue with getting an assignment in on time, let me know at least a week in advance to make accommodations. Assignment extensions will only be granted in the case of an emergency or observance of a religious holiday.

**Grade Change Policy**

I am fallible. I will likely make mistakes on your assignments. With that said, there will be times when you will receive a grade on the writing assignment that you think may not be fair. I encourage you to come to see me during office hours and advocate for yourself. I want you to argue with me and explain why you deserve the points you were not given. You will not be penalized for doing so. This will be a fun conversation.

**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 the coursework 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 coursework 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 coursework.

**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 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.

**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 produce your best work.

**Course Schedule**

| ***Week*** | ***Date*** | ***Topic*** | ***Readings*** |
| --- | --- | --- | --- |
| Week 1 Lecture | 7/6 – 7/9 | Introduction  Scientific Reasoning | Chapters 1 and 2 |
| Week 1  Lab | 7/6 – 7/9 | JASP Stat Tutorial | Syllabus |
| Week 2  Lecture | 7/12 – 7/16 | Ethics in Psychological Research  Basic Statistics | Chapter 4  Morling p.457-504 |
| Week 2  Lab | 7/12 – 7/16 | JASP Datasets & Form Hypotheses  Descriptive & Inferential Stats w/JASP |  |
| Week 3  Lecture | 7/19 – 7/23 | Measurement | Chapter 5 |
| Week 3  Lab | 7/19 – 7/23 | **Writing Assignment 1 due on 7/19**  Exam Review |  |
| Week 4  Exam | 7/26 | **Exam 1 (Lecture weeks 1-3)** |  |
| Week 4  Lecture | 7/26 – 7/30 | Surveys | Chapter 6 |
| Week 4  Lab | 7/26 – 7/30 | Writing Survey Questions  Writing Methods |  |
| Week 5  Lecture | 8/2 – 8/6 | Sampling  Experiments | Chapter 7  Chapters 10-12 |
| Week 5  Lab | 8/2 – 8/6 | Strategies for Data Analysis  Student Data Analysis  **Writing Assignment 2 due on 8/2** |  |
| Week 6  Lecture | 8/9 – 8/13 | Correlational Research  Quasi-Experimental Research | Chapters 8 and 9  Chapter 13 |
| Week 6  Lab | 8/9 – 8/13 | Writing Results  Final Exam Review |  |
| Week 7  Lecture | 8/16 – 8/19 | Wrap up any outstanding material |  |
| Week 7  Lab | 8/16 – 8/19 | **Final Writing Assignment due on 8/19** |  |
| Week 7 | 7/1 | **Exam 2 (Lecture weeks 4-7)** |  |