



PSYC 2388-005 Psychological Research and Statistics I
CRN 13377 T&R 2:00-3:15 PM
Fall 2025 | SciTech 125

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Office Hrs [Book appointment here.](#)

Course Description

From the catalog: An introduction to the methods and analysis of data from psychological studies. Fundamental concepts and techniques of both descriptive and inferential statistics and their application to psychological research. Prerequisites: PSYC 2301 and MATH 1314. Corequisite(s): PSYC 2188.

Required Course Materials

- **Textbook:** McBride, D. (2019). *The Process of Research and Statistical Analysis in Psychology*. Sage. ISBN for textbook and workbook bundle: 9781544389165
- **Workbook:** McBride, D. (2019). *Lab Manual for Psychological Research and Statistical Analysis*. 1st Edition. Sage. ISBN for textbook and workbook bundle: 9781544389165
- **Handbook:** American Psychological Association. (2019). *Publication manual* (7th ed). Washington, DC
***Reserve copy available in library if you don't own a copy.
- **Calculator:** In this class we will use a simple calculator. Please do not buy or bring a scientific or graphing calculator. ***YOU MAY NOT USE YOUR PHONE AS A CALCULATOR!***

Contact Guidelines

I make every effort to be available to aid you in your learning process. There are a number of ways in which you can contact me.

- **Email:** Only use official university e-mail through Blackboard and include course and section (e.g., PSYC 2388) and full name in subject line. Failure to follow these steps will result in my not responding to your email. This is my primary and preferred point of contact outside of the classroom. I check my messages regularly on Monday – Friday from 8 to 5. Within that timeframe, I will generally respond within 24 hours. If you don't hear back from me, email again in the event your message went to my Junk email box. On weekends, I am generally not available by email and will reply on the subsequent Monday. If you need to contact me, plan ahead. In all communications, be specific. Your correspondence **MUST** include information as specified above. If you send an email without sufficient information, I likely won't reply. Additionally, begin a new email thread in lieu of responding back to one of my emails if you are beginning a new conversation unrelated to the previous email. Professional language and formatting is expected.
- **Office:** Meetings may be held in my office on campus, or virtually.

Course Note

This course is part of a sequence of courses. Further, this course lays the foundation for all other Psychology Courses you may take. It is a challenging, but incredibly important course. Truly learn the material, and all the classes after this one will be easier.

Learning Objectives

Student learning outcomes are based on the Specific Learning Objectives from APA Guidelines for Psychology Majors: <http://www.apa.org/ed/precollege/about/psymajor-guidelines.pdf>

In this class, the following student learning outcomes are expected:

- 1.3 Describe applications of psychology
- 2.1 Use scientific reasoning to interpret psychological phenomena

- 2.2 Demonstrate psychology information literacy
- 2.3 Engage in innovative and integrative thinking and problem solving
- 2.4 Interpret, design, and conduct basic psychological research
- 2.5 Incorporate sociocultural factors in scientific inquiry
- 3.1 Apply ethical standards to evaluate psychological science and practice
- 3.2 Build and enhance interpersonal relationships
- 4.1 Demonstrate effective writing for different purposes
- 4.2 Exhibit effective presentation skills for different purposes
- 4.3 Interact effectively with others
- 5.1 Apply psychological content and skills to career goals
- 5.2 Exhibit self-efficacy and self-regulation
- 5.3 Refine project management skills
- 5.4 Enhance teamwork capacity
- 5.5 Develop meaningful professional direction for life after graduation

Additional Readings

- **Blackboard Readings:**

- o You'll find links to supplementary readings on Blackboard. These readings are chosen to deepen your understanding of course topics and may range from academic articles to relevant popular media. Deadlines for these readings are listed in the syllabus.

- **Independent Research:**

- o Some assignments will require you to find your own sources. Unless otherwise specified, use only **peer-reviewed journal articles** for research papers.

Important: Access articles as **PDF files** to avoid errors common in "full text" versions. If you can't find a PDF, request the article through interlibrary loan.

Preparation is Key

To get the most out of our class discussions and lectures, please complete the initial readings before the scheduled class. Familiarizing yourself with the content and vocabulary beforehand allows you to:

- Participate actively: Engage in conversations, ask informed questions, and seek clarification on confusing points.
- Maximize learning: Build on the lecture material and gain a deeper understanding of the topics.

It's perfectly fine if you don't understand everything on the first read! The goal is to be familiar enough to contribute to the class and get the most out of the learning experience. Find the reading schedule on the course calendar.

Computer

This course requires access to a computer with a reliable internet browser, an internet connection, the ability to read PDF information, Microsoft Office Word and MS PowerPoint. It is recommended that you have the most recent versions of MS Office products available.

Note: ALL written assignments are due as **MS Word docx** or **PDF** files unless otherwise noted. **Computers are available on campus at several locations, including, but not limited to, the library, and computer labs. These computers meet the requirements above.**

Grading

Your final grade for this course will be determined by your performance on assessments and various assignments. Refer to the Course Calendar for specific assessment dates, assignment due dates, and other important deadlines.

Assessment and Evaluation

Class Participation Reflection Questions – 10 points

Active participation is crucial in creating a vibrant learning environment. Contribute meaningfully to class discussions by sharing your insights, asking questions, and responding thoughtfully to the ideas of others. In class, we will all access Socrative and answer reflection questions about the content that we did and did not understand. This reflection period will last the first five minutes of class. Therefore, it is essential that you show up on time if you want to earn credit for the quizzes. Save a university approved excuse, quizzes **cannot** be made up.

Chapter Quizzes – 10 points

Regular quizzes will serve as checkpoints to gauge your understanding of key concepts and ensure you're keeping pace with the material. Chapter quizzes will be due on Mondays at 11:59 pm.

Assessments – 50 points

These assessments will delve deeper into your comprehension, requiring you to apply theoretical knowledge to practical scenarios and analyze research findings. You'll be challenged to articulate your understanding clearly and concisely, demonstrating your ability to think critically about the subject matter.

Logistics:

Arrive on time. All assessments end when class time ends. The assessments are designed to be completed in 50 minutes. Manage your time effectively. Unanswered questions will be considered incorrect. The assessment schedule is provided on the first day of class. Make-up assessments are only granted for documented emergencies and may be oral. Make-up assessments should be completed within one week of the original assessments date, if possible.

Academic Integrity:

Only assessments materials and writing utensils are allowed on your desk. Cell phones must be turned off **completely**, not silent. Smartwatches and headphones must be removed. Using a cell phone or smartwatch during an assessment will result in a zero on the assessment and a referral to the Office of Student Rights and Responsibilities. Consequences can range from a zero on the assessment to expulsion from the university. You will also need to meet with the instructor before returning to class.

Grading and Feedback:

Regular assessment grades will typically be discussed at the next class meeting. Final project/assessment grades will be posted within 5 days of the due date. Your grade reflects your knowledge of the material. Aim to master at least 90% of the material for an A, 80-89.4% for a B, and so on.

Additional Assignments –20 points

Types of Assignments: This course may include quizzes, various discussion formats, reaction papers, blogs/journals, video presentations, statistical calculations, homework assignments, and essays. Point values for each assignment are listed in the course calendar. Detailed instructions will be provided on Blackboard.

Group Poster Presentation – 50 points

Working in teams of 2–3, you will select a peer-reviewed psychology research article that connects to course topics in research methods and statistics. Your group will analyze the article's research question, design, methodology, results, and implications, and then create a visually engaging poster that summarizes the study. On finals day, your group will present

the poster to the class, explaining the research clearly and answering questions about its methods and findings. Evaluation will be based on clarity, accuracy, organization, visual appeal, and presentation skills.

Group Poster Final Report – 50 points

In addition to the group poster, **each** student will submit an individual written report analyzing the chosen article in greater depth. Your report will include a clear summary of the study, an explanation of its design and methodology, an interpretation of its statistical results, and a critical evaluation of strengths, limitations, and broader implications. You will also reflect on how ethical guidelines were addressed and identify the study's variables. Reports should be well-written using APA style and demonstrate a strong comprehension of course content.

Class absences and questions: *Before and after class, we may have some time to discuss a limited number of questions. However, if you have questions because you missed class, were late to class, or need additional help with a specific sequence of steps, you need to set up an appointment to come and discuss those issues during my office hours. Life happens; I get it. However, I cannot capture everything that we discussed or help you follow the same sequence in those short periods of time. A one-on-one environment is going to be much more conducive to making sure that you get caught up – rather than a rushed exchange in those brief periods around the class time.*

Making an appointment through email (by using the Email your Professor feature of blackboard) will ensure that we have enough time to discuss those questions and anything else that you may want in my office. If you are in a position where you are consistently struggling to make it to class on time, I also suggest that you come see me. We may be able to explore alternatives so that you can more reasonably meet the expectations of the course. See syllabus for office hours.

Course Schedule

Although I will do my best to abide by this schedule, some topics may be carried over and others may end earlier than expected, and we will transition to the next topic in the schedule. Any topic changes will be announced either by lecture, e-mail and/or Blackboard, or a combination thereof. You are responsible for keeping up with any possible changes to the course schedule.

The final exam (assessment) dates will be announced during the Fall and Spring semesters or will take place on the final day of class during Summer. Once announced, it will be listed at <https://www.tamusa.edu/provost/academic-calendar.html>

TENTATIVE* Course Calendar

***Assignments and schedule are subject to change.**

Week	Readings Due This Week	In-Class Topic	Skills Focus	Assignments Due	Pts
Wk 1 1 25-Aug	Syllabus	Introductions Syllabus & Course Outline Why Psychologists Ask Questions the Way They Do	Scientific method, goals, data types	Introduction Survey Reflection Quiz 1	10 10
Wk 2 1-Sept	Chapter 1 Chapter 2	Finding Questions That Help People	Research questions, reading research	Syllabus & Chapter 1 Quiz due 9/1 Reflection Quiz 2 Reflection Quiz 2.5	10 10 10
Wk 3 8-Sept	Chapter 3	Doing the Right Thing in Research	Ethics, IRB, informed consent	Chapter 2 Quiz due 9/8 Reflection Quiz 3 Reflection Quiz 3.5	10 10 10

Wk 4 15-Sept		Review Ch. 1–3 Assessment 1		Chapter 3 Quiz due 9/15 Reflection Quiz 4 Assessment 1 will cover Chapter 1-3, outside readings, calculations, and any additional info	10 10 50
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Wk 5 22-Sept	Chapter 4	The Numbers Behind Research	Sampling, probability	Reflection Quiz 5 Reflection Quiz 5.5	10 10
Wk 6 29-Sept	Chapter 5	From Ideas to Data	Data collection, research designs {Midterm}	Chapter 4 Quiz due 9/29 Reflection Quiz 6 Reflection Quiz 6.5	10 10 10
Wk 7 6-Oct	Chapter 6	Making Sense of Data	Central tendency, variability, graphs	Chapter 5 Quiz due 10/6 Reflection Quiz 7 Reflection Quiz 7.5	10 10 10
Wk 8 13-Oct		Review Ch. 4–6 Assessment 2		Chapter 6 Quiz due 10/13 Reflection Quiz 8 Stat HW: Central Tendency Assessment 2 will cover Chapter 4-6, outside readings, calculations, and any additional info	10 10 20 50
Wk 9 20-Oct	Chapter 7	The Trust Factor in Research	Validity, IVs	Stat HW: Variability / Standard Deviation, Histograms / Graphs Reflection Quiz 9 Reflection Quiz 9.5	20 10 10
Wk 10 27-Oct	Chapter 8	When One Factor Changes Everything	One-factor experiments	Chapter 7 Quiz due 10/27 Reflection Quiz 10 Reflection Quiz 10.5	10 10 10
Wk 11 3-Nov	Chapter 9	From Hypotheses to Decisions	Hypothesis testing logic	Chapter 8 Quiz due 11/3 Reflection Quiz 11 Reflection Quiz 11.5	10 10 10
Wk 12 10-Nov	Chapter 10	Testing in the Real World	T-test	Chapter 9 Quiz due 11/10 Reflection Quiz 12 Reflection Quiz 12.5	10 10 10
Wk 13 17-Nov		Review Ch. 7–10 Assessment 3		Chapter 10 Quiz due 10/17 Reflection Quiz 13 Stat HW: T-test hand calculations Assessment 3 will cover Chapter 7-10, outside readings, calculations, and any additional info	10 10 20 50
Wk 14 24-Nov		Working on Final Project			
Wk 15 1-Dec		Final Group Presentation		Presentations during class time	50
Wk 16 Finals		Final Exam Week		Group Poster Final Report	50
Final Grade					640