

Professor	Brett Murphy, JD, PhD	Phone	210-784-2814
Office	STEM 237E	E-mail	bmurphy@tamusa.edu
Student Office Hours	Tues/Thurs: 3:30 – 5PM Weds: 10-11AM, 4 – 5PM By Appointment via Calendly: https://calendly.com/bmurphy-tamusa/dr-murphy-office-hours	Teaching Assistant	Sophia Salamanca ssala070@jaguar.tamu.edu

Course Description

From the catalog: Introduction to basic research methodology (i.e., designing and evaluating behavioral research) and ethical issues in research. Statistical methods will be discussed as they pertain to research design and interpretation. Prerequisites: PSYC 2301 PSYC 2385, minimum Grade of C in PSYC 2388, and MATH 1314. Corequisites: PSYC 3088. TSI Restriction(s): Math

Required Course Materials

- *Textbook:* McBride, D. (2019). *The Process of Research and Statistical Analysis in Psychology*. Sage.
- *Workbook:* McBride, D. (2019). *Lab Manual for Psychological Research and Statistical Analysis*. 1st Edition. Sage
- *Handbook:* American Psychological Association. (2019). *Publication manual (7th ed)*. Washington, DC: Author. Reserve copy is available in the library if you don't already own a copy.
- *Software:* We will be using JASP (Jeffreys's Amazing Statistics Program) and Microsoft Excel during class, and you will be required to use JASP or Microsoft Excel to complete homework. It is available in the computer labs on campus. We will also be using Excel with the Data Analysis package add-in. This software is available in the computer labs on campus and be downloaded through information technology services for your personal devices.

Contact Guidelines:

I will strive to be available to aid your learning process by providing a number of ways to contact me:

- ***Email:*** Only use official university e-mail and include the course and section (e.g., PSYC 2385) and full name in subject line. Please do not use Blackboard messages! My university email is my primary and preferred point of contact outside of the classroom.

I check my email regularly on Monday – Friday from 8 to 5. I will generally respond back within 24 hours of this timeframe. If you do not hear back from me, email again in the event your message went to my Junk email box and/or follow up directly with me in class or during office hours (see above). On the weekends, I am not available by email but will reply on the subsequent Monday. Please plan ahead especially when it comes to clarifying assignment instructions and/or submission requirements.

In all communications, please be professional in your tone and specific in your message (i.e., avoid informal correspondence styles like text messaging which lack appropriate punctuation and capitalization). Your correspondence **MUST** include the information specified above. If you send an email without sufficient information, I likely will not reply or may reply asking for clarification about

your inquiry (this can result in an unnecessary delay). Please begin a new email thread in lieu of responding back to older emails if you are beginning a new conversation unrelated to the previous email (this helps minimize confusion caused by chain replies).

- ***Student Hours:*** I will be available in my office (STEM 237E) to meet during student hours (see times listed above). Student hours are dedicated to interacting with and providing students assistance regarding course work. The Calendly link above allows you to sign up for a 15-minute slot and choose whether you would prefer to meet in my office or on zoom. If you need more than 15 minutes, please sign up for 2 adjacent slots (30 minutes total). Office hour slots are on a first-come, first-serve basis. If there is a specific assignment/materials or topic you want to discuss, providing advance notice will allow me to have these resources ready. If students cannot meet during these times, an alternative time can be requested via email and I will do my best to try to accommodate students accordingly. For discussions involving more personal and/or sensitive information, some form of advance notice is recommended.

Learning Objectives and Class Structure

This course will teach you the fundamentals of understanding and conducting research in psychology. We will discuss how research projects are selected, designed, and performed. We will also discuss how to evaluate the research of others (and our own research designs!). You will learn how to conduct statistical analyses such as ANOVA and Pearson correlation. You will receive some basic training in JASP and learn how to analyze data. Also, you will formulate your own hypotheses based on theories we've discussed, design an experiment, analyze provided data, and decide whether your hypotheses were supported.

Specific Learning Objectives (from APA Guidelines for Psychology Majors)

This course will Reinforce the student's ability to	Outcomes
2.1 Use scientific reasoning to interpret psychological phenomena	2.1a Identify basic biological, psychological, and social components of psychological explanations (e.g., inferences, observations, operational definitions, interpretations)
	2.1b Use psychology concepts to explain personal experiences and recognize the potential for flaws in behavioral explanations based on simplistic, personal theories
	2.1c Use an appropriate level of complexity to interpret behavior and mental processes
	2.1d Ask relevant questions to gather more information about behavioral claims
	2.1e Describe common fallacies in thinking (e.g., confirmation bias, post hoc explanations, implying causation from correlation) that impair accurate conclusions and predictions
2.2 Demonstrate psychology information literacy	2.2b Describe what kinds of additional information beyond personal experience are acceptable in developing behavioral explanations (i.e., popular press reports vs. scientific findings)
	2.2c Identify and navigate psychology databases and other legitimate sources of psychology information
	2.2d Articulate criteria for identifying objective sources of psychology information
2.4 Interpret, design, and conduct basic psychological research	2.4a Describe research methods used by psychologists including their respective advantages and disadvantages
	2.4b Discuss the value of experimental design (i.e., controlled comparisons) in justifying cause– effect relationships
	2.4g Describe the fundamental principles of research design
2.5 Incorporate sociocultural factors in scientific inquiry	2.5a Relate examples of how a researcher's value system, sociocultural characteristics, and historical context influence the development of scientific inquiry on psychological questions
4.1 Demonstrate effective writing for different purposes	4.1a Express ideas in written formats that reflect basic psychological concepts and principles
	4.1b Recognize writing content and format differ based on purpose (e.g., blogs, memos, journal articles) and audience
	4.1c Use standard English, including generally accepted grammar
	4.1d Write using APA style
	4.1e Recognize and develop overall organization (e.g., beginning, development, ending) that fits the purpose

This course will Assess the student's ability to	Outcomes
2.2 Demonstrate psychology information literacy	2.2a Read and summarize general ideas and conclusions from psychological sources accurately
	2.2e Interpret simple graphs and statistical findings
2.3 Engage in innovative and integrative thinking and problem solving	2.3a Recognize and describe well-defined problems
	2.3b Apply simple problem-solving strategies to improve efficiency and effectiveness
	2.3c Describe the consequences of problem solving attempts
2.4 Interpret, design, and conduct basic psychological research	2.4c Define and explain the purpose of key research concepts that characterize psychological research (e.g., hypothesis, operational definition)
	2.4d Replicate or design and conduct simple scientific studies (e.g., correlational or two-factor) to confirm a hypothesis based on operational definitions
	2.4e Explain why conclusions in psychological projects must be both reliable and valid
	2.4f Explain why quantitative analysis is relevant for scientific problem solving
	2.5b Analyze potential challenges related to sociocultural factors in a given research study
	2.5c Describe how individual and sociocultural differences can influence the applicability/ generalizability of research findings
	2.5d Identify under what conditions research findings can be appropriately generalized
4.1 Demonstrate effective writing for different purposes	4.1f Interpret quantitative data displayed in statistics, graphs, and tables, including statistical symbols in research reports
	4.1g Use expert feedback to revise writing of a single draft

Course Assignments

Exams:

- There will be a total of three exams each worth 100 points.
- Exams will be split up into two parts administered through Blackboard: a 60-minute multiple choice section worth 40 points and an untimed take-home section worth 60 points.
- Both parts will need to be completed by the specified deadline (see calendar) and students can complete them in any order.
- Students may not receive any outside assistance while completing either part of their exams.
- Students may, however, use their notes and textbook while completing the take-home portion only!

Pop Quizzes:

- During the semester, there will be five pop quizzes which will be administered during class time. You will receive full credit for each quiz simply by being present when it is administered and trying to complete it. If you have a valid excused absence, you can receive full credit for a quiz even if you miss class that day.

Writing Assignments:

- A requirement for research stat II involves writing a research paper that adheres to APA standards. In preparation for this research paper, students will complete two different writing assignments this semester.
- **Writing Assignment #1** will involve identifying a potential research question and constructs of interest, locating appropriate peer-reviewed articles, etc. Feedback will be provided to students.
- **Writing Assignment #2** will involve producing a 3-page APA-style Introduction (i.e., literature review) including a testable hypothesis and citations for six peer-review sources, an APA-style Method section of students proposed research experiment (approximately 2-pages), and a properly formatted APA-style Reference section that includes source information for each citation (approximately 2-pages).
 - A rubric will be provided, and students will receive extensive feedback about their submission.

Final Research Paper:

- The final research paper will be comprised of a corrected Introduction, Method, and Reference sections utilizing feedback from Writing Assignment #2.
- Students will be adding a proposed Results section with an analysis of a data set provided by the instructor that corresponds to students' research design. Students will be expected to accurately describe this analysis, report statistical values in accordance to APA standards, provide an APA-style figure (graph) that accurately depicts their analysis, and interpret findings in the context of students' proposal hypothesis.
- A rubric and a checklist for the Final Research Paper will be provided.
- The final length of the paper will be between 8 – 10 pages.

Point Breakdown for the Semester (subject to change)

<i>Course Component</i>	<i>Point Value</i>	<i>Number</i>	<i>Total Points</i>
Exams	100	3	300
Pop Quizzes	20	5	100
Writing Assignments	50	2	100
Final Research Paper	150	1	150
Total			650

Grades will be posted on Blackboard where you (and only you) can access your grade to protect your confidentiality and identity.

Decimal points of .5 and greater will be rounded up. Decimal points below .5 will be rounded down. For the sake of fairness, there are no exceptions to this.

*Please monitor your grades and come to me **early** with any concerns you may have so that I can help you achieve your goals.*

Grade	Percentage	Point Range
A	90-100%	585-650
B	80-89%	520-584
C	70-79%	455-519
D	60-69%	390-454
F	<60%	Less than 390 points

Late Work Submission Policy:

Students may submit late work up to three days past the assignment deadline with an approved excused with no penalty.

What constitutes a valid “excuse” is up to the discretion of your instructor and would require students to communicate in advance (when possible) or in a timely manner to discuss their submission status.

Your instructor reserves the right to request appropriate documentation and/or may request additional information to make a determination about your status.

In the event students do not have a valid excuse or elect not to discuss their status with their instructor, a 20% penalty will be automatically applied to any submitted work.

Any non-excused late work submitted more than 3 days after an assignment deadline will receive a grade of 0.

Use of A.I. Policy:

USAGE OF ARTIFICIAL INTELLIGENCE FOR WRITING ASSIGNMENTS

The use of generative AI, such as ChatGPT, is prohibited *without my express permission*, except in the following ways:

- To ensure proper usage of English in students' original self-written materials
 - Prompt: Review the text below and note any grammatical errors. Be detailed and provide examples/explanations.
- To identify areas of improvement in students' original self-written materials
 - Prompt: Review the text below and identify areas of improvement. Be detailed and provide examples/explanations. Do not rewrite it for me.

Students who choose to utilize generative AI tools for this purpose **MUST**:

- Declare the use of AI tools by identifying the program and purpose (i.e., allowed uses)
- Cite the tool in the reference section
- Include their original writing as an appendix to any assignment submission

If generative AI usage is detected and not declared upon assignment submission, the student may be held accountable for violating the Academic Integrity Policy. The first step following any flagged material is a one-on-one conversation in a timely manner with the student to discuss the situation further and to determine what course of action is appropriate.

Course Schedule

I will do my best to abide by this schedule. Any topic changes or course adjustments will be announced by any one or a combination of lecture, e-mail and/or Blackboard. You are responsible to keep up with any possible changes to the course schedule.

Week	Date	Topic	Assignment
1	Jan 21	Cancelled for weather	
	Jan 23	Introductions, Course Expectations, Stats Review (Ch 7, 8, 9)	
2	Jan 28	Review: Ch. 8 and 9 (Hypothesis Testing pt 1)	
	Jan 30	Review: Ch. 9 (Hypothesis Testing pt 2)	
3	Feb 4	Review: Writing in Psychology	
	Feb 6	Review: Ch. 10 (t tests pt 1)	
4	Feb 11	Review: Ch. 10 (t tests pt 2)	
	Feb 13	Review: Ch. 10 (t tests pt 3)	Writing Assignment #1 (Due Feb 14th)
5	Feb 18	EXAM 1 ***NO CLASS***	
	Feb 20	EXAM 1 ***NO CLASS***	
6	Feb 25	Ch. 11: One-Way ANOVA pt 1	
	Feb 27	Ch. 11: One-Way ANOVA pt 2	
7	Mar 4	Ch. 11: One-Way ANOVA pt 3	
	Mar 6	Ch. 16: One-way Within-Subjects Analysis pt 1	
8	Mar 11	SPRING BREAK ***NO CLASS***	
	Mar 13	SPRING BREAK ***NO CLASS***	
9	Mar 18	Ch. 16: One-way Within-Subjects Analysis pt 2	
	Mar 20	Ch 16: One-Way Within-Subjects Analysis pt 3	
10	Mar 25	Ch. 14: Multi-Factor Experiments pt 1	
	Mar 27	Ch. 14: Multi-Factor Experiments pt 2	Writing Assignment #2 (Due Mar 28th)
11	April 1	EXAM 2 ***NO CLASS***	
	April 3	EXAM 2 ***NO CLASS***	
12	April 8	Ch. 15: Two-Way ANOVA pt 1	
	April 10	Ch. 15: Two-Way ANOVA pt 2	
13	April 15	Ch. 15: Two-Way ANOVA pt 3	
	April 17	Ch. 12 Correlation and Regression pt 1	
14	April 22	Ch. 12 Correlation and Regression pt 2	
	April 24	Ch. 12 Correlation and Regression pt 3	
15	April 29	Ch. 13 Chi-Square	
	May 1	Ch. 13 Chi-Square	Final Research Paper (Due May 2nd)
TBD		Final Exam (See Academic Calendar for Date & Time)	



TEXAS A&M UNIVERSITY
SAN ANTONIO

IMPORTANT POLICIES AND RESOURCES

Academic Accommodations for Individuals with Disabilities: Texas A&M University-San Antonio is committed to providing all students with reasonable access to learning opportunities and accommodations in accordance with The Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act. If you experience barriers to your education due to a disability or think you may have a disability, Disability Support Services is located in the Central Academic Building, Suite 210. You can also contact us via phone at (210) 784-1335, visit us <https://www.tamusa.edu/Disability-Support-Services/index.html> or email us at dss@tamusa.edu. Disabilities may include, but are not limited to, attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability-related needs with Disability Support Services and their instructors as soon as possible.

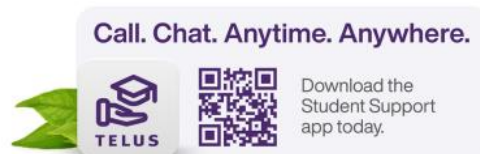
Academic Learning Center: The Academic Learning Center provides free course-based tutoring to all currently enrolled students at Texas A&M University-San Antonio. Students wishing to work with a tutor can make appointments through the Brainfuse online tutoring platform. Brainfuse can be accessed in the *Tools* section of Blackboard. You can contact the Academic Learning Center by emailing tutoring@tamusa.edu, calling (210) 784-1307, or visiting the Central Academic Building, room 202.

Counseling/Mental Health Resources: As a college student, there may be times when personal stressors interfere with your academic performance and negatively impact your daily functioning. If you are experiencing emotional difficulties or mental health concerns, support is available to you through the Student Counseling Center (SCC). To schedule an appointment, call 210-784-1331 or visit Madla 120.

All mental health services provided by the SCC are free and confidential (as the law allows). The Student Counseling Center provides brief individual and group therapy, crisis intervention, consultation, case management, and prevention services. For more information on SCC services visit tamusa.edu/studentcounseling

Crisis support is available 24/7 by calling the SCC at 210-784-1331 (after-hours select option '2').

Additionally, the TELUS Student Support App provides a variety of mental health resources to including support for in the moment distress, an anonymous peer to peer support network, mental health screenings, podcasts, and articles to improve your mental wellbeing.



Emergency Preparedness: JagE Alert is Texas A&M University-San Antonio's mass notification. In the event of an emergency, such as inclement weather, students, staff and faculty, who are registered, will have the option

to receive a text message, email with instructions and updates. To register or update your information visit: <https://tamusa.bbcportal.com/>.

More information about Emergency Operations Plan and the Emergency Action Plan can be found here: <https://www.tamusa.edu/about-us/emergency-management/>.

Download the SafeZone App (<https://safezoneapp.com/>) for emergencies or call (210) 784-1911. Non-Emergency (210) 784-1900.

Financial Aid and Verification of Attendance: According to the following federal regulation, 34 CFR 668.21: U.S. Department of Education (DoE) Title IV regulation, a student can only receive Title IV funds based on Title IV eligibility criteria which include class attendance. If Title IV funds are disbursed to ineligible students (including students who fail to begin attendance), the institution must return these funds to the U.S. DoE within 30 days of becoming aware that the student will not or has not begun attendance. Any student receiving federal financial aid who does not attend by the census date will have their financial aid terminated and returned to the DoE. Please note that any student who stops attending at any time during the semester, a Care report will be submitted, and you will possibly be dropped from the class. Your financial aid may have to be recalculated and a portion of your federal aid may have to be returned to the DoE.

Writing, Language, and Digital Composing Center: The Writing, Language, and Digital Composing Center supports graduate and undergraduate students in all three colleges as well as faculty and staff. Tutors work with students to develop reading skills, prepare oral presentations, and plan, draft, and revise their written assignments. Our language tutors support students enrolled in Spanish courses and students composing in Spanish for any assignment. Our digital studio tutors support students working on digital projects such as eportfolios, class presentations, or other digital multimedia projects. Students can schedule appointments through JagWire under the Student Services tab. Click on “Writing, Language, and Digital Composing Center” to make your appointment. The Center offers face-to-face, synchronous online, and asynchronous digital appointments. More information about what services we offer, how to make an appointment, and how to access your appointment can be found on our website at <https://www.tamusa.edu/academics/>.

Meeting Basic Needs: Any student who has difficulty affording groceries or accessing sufficient food to eat every day or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to submit a CARE referral (<https://www.tamusa.edu/university-policies/Student-Rights-and-Responsibilities/file-a-report.html>) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to direct you to available resources.

Military Affairs: Veterans and active-duty military personnel are welcomed and encouraged to visit the Office of Military Affairs for any question involving federal or state VA Education Benefits. Visit the Patriots’ Casa building, room 202, or to contact the Office of Military Affairs with any questions at military.va@tamusa.edu or (210)784-1397.

Religious Observances: Texas A&M University-San Antonio recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or course work requirements that may be missed due to a religious observance provided they notify their instructors before the end of the second week of classes for regular session classes.

The Six-Drop Rule: Students are subject to the requirements of Senate Bill (SB) 1231 passed by the Texas Legislature in 2007. SB 1231 limits students to a maximum of six (6) non-punitive course drops (i.e., courses a student chooses to drop) during their undergraduate careers. A non-punitive drop does not affect the student's GPA. However, course drops that exceed the maximum allowed by SB 1231 will be treated as "F" grades and will impact the student's GPA.

Statement of Harassment and Discrimination: Texas A&M University-San Antonio is committed to the fundamental principles of academic freedom, equal opportunity, and human dignity. To fulfill its multiple missions as an institution of higher learning, A&M-San Antonio encourages a climate that values and nurtures collegiality and the uniqueness of the individual within our state, nation, and world. All decisions and actions involving students and employees should be based on applicable law and individual merit. Texas A&M University-San Antonio, in accordance with applicable federal and state law, prohibits discrimination, including harassment, on the basis of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation, gender identity, gender expression, or pregnancy/parenting status. Individuals who believe they have experienced harassment or discrimination prohibited by this statement are encouraged to contact the appropriate offices within their respective units.

Texas A&M University-San Antonio faculty are committed to providing a safe learning environment for all students and for the university as a whole. If you have experienced any form of sex- or gender-based discrimination or harassment, including sexual assault, sexual harassment, domestic or dating violence, or stalking, know that help and support are available. A&M-San Antonio's Title IX Coordinator can support those impacted by such conduct in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The university strongly encourages all students to report any such incidents to the Title IX Coordinator. Please be aware that all A&M-San Antonio employees (other than those designated as confidential resources such as counselors and trained victim advocates) are required to report information about such discrimination and harassment to the university. This means that if you tell a faculty member about a situation of sexual harassment, sexual violence, or other related misconduct, the faculty member must share that information with the university's Title IX Coordinator (titleix@tamusa.edu, 210-784-2061, CAB 439K). If you wish to speak to a confidential employee who does not have this reporting requirement, you can contact the Student Counseling Center at (210) 784-1331 or visit them in Madla 120.

Pregnant/Parenting Students: Texas A&M-San Antonio does not require a pregnant or parenting student, solely because of that status or issues related to that status, to (1) take a leave of absence or withdraw from their degree or certificate program; (2) limit the student's studies; (3) participate in an alternative program; (4) change the student's major, degree, or certificate program; or (5) refrain from joining or cease participating in any course, activity, or program at the University. The university will provide such reasonable accommodations to pregnant students as would be provided to a student with a temporary medical condition that are related to the health and safety of the student and the student's unborn child. These could include maintaining a safe distance from substances, areas, and activities known to be hazardous to pregnant individuals and their unborn child; excused absences because of illness or medical appointments; modified due dates for assignments; rescheduled tests/exams; taking a leave of absence; and being provided access to instructional materials and video recordings of lectures for excused absences, if these would be provided to any other student with an excused absence. Pregnant/parenting students are encouraged to contact the Title IX Coordinator with any questions or concerns related to their status (titleix@tamusa.edu; 210-784-2061; CAB 439K).

Texas A&M-San Antonio has also designated the Title IX Coordinator as the liaison officer for current or incoming students who are the parent or guardian of a child younger than 18 years of age. The Title IX Coordinator can provide students with information regarding support services and other resources.

Students' Rights and Responsibilities: The following statement of students' rights and responsibilities is intended to reflect the philosophical base upon which University Student Rules are built. This philosophy acknowledges the existence of both rights and responsibilities, which is inherent to an individual not only as a student at Texas A&M University-San Antonio but also as a citizen of this country.

Students' Rights

1. A student shall have the right to participate in a free exchange of ideas, and there shall be no University rule or administrative rule that in any way abridges the rights of freedom of speech, expression, petition and peaceful assembly as set forth in the U.S. Constitution.
2. Each student shall have the right to participate in all areas and activities of the University, free from any form of discrimination, including harassment, on the basis of race, color, national or ethnic origin, religion, sex, disability, age, sexual orientation, gender identity, gender expression, and pregnancy/parenting or veteran status in accordance with applicable federal and state laws.
3. A student has the right to personal privacy except as otherwise provided by law, and this will be observed by students and University authorities alike.
4. Each student subject to disciplinary action arising from violations of university student rules shall be assured a fundamentally fair process.

Students' Responsibilities

1. A student has the responsibility to respect the rights and property of others, including other students, the faculty, and administration.
2. A student has the responsibility to be fully acquainted with the published University Student Rules found in the Student Handbook, [Student Code of Conduct](#), on our website, and University Catalog, and to comply with them, as well as with federal, state, and local laws.
3. A student has the responsibility to recognize that student actions reflect upon the individuals involved and upon the entire University community.
4. A student has the responsibility to recognize the University's obligation to provide a safe environment for learning.
5. A student has the responsibility to check their university email for any updates or official university notifications.

We expect that students will behave in a manner that is dignified, respectful, and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation, or disability. Conduct that infringes on the rights of another individual will not be tolerated.

Students are expected to exhibit a high level of honesty and integrity in their pursuit of higher education. Students engaging in an act that violates the standards of academic integrity will find themselves facing academic and/or disciplinary sanctions. Academic misconduct is any act, or attempt, which gives an unfair

advantage to the student. Additionally, any behavior specifically prohibited by a faculty member in the course syllabus or class discussion may be considered as academic misconduct. For more information on academic misconduct policies and procedures please review the Student Code of Conduct (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/documents/Student-Handbook-2022-23.pdf>) or visit the resources available in the OSRR website (<https://www.tamusa.edu/university-policies/student-rights-and-responsibilities/academic-integrity.html>).