



PSY 302-01H, Statistics and Research Methods I

TR: 11 a – 12:15 p

COURSE SYLLABUS: Fall 2026

Location: Sowers Education South, Room 129

INSTRUCTOR INFORMATION

Instructor: Benton Pierce, Ph.D.

Office Location: Henderson 232

Office Hours: Mondays, 11am – 12pm, 1-4 pm; Tuesday and Thursdays, 3:30-4 pm

Office Phone: n/a

Office Fax: n/a

University Email Address: benton.pierce@etamu.edu

Preferred Form of Communication: Email

Communication Response Time: Within one business day.

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required:

This course will use a combination of two **FREE** open access books. You can access these directly from the links below or through Perusall.

- Research Methods in Psychology
 - <https://kpu.pressbooks.pub/psychmethods4e/>
- Introduction to Statistics in the Psychological Sciences
 - <https://umsystem.pressbooks.pub/isps/>

Software Required: Microsoft Office or equivalent; PDF; myLeo/Desire2Learn (D2L)

The syllabus/schedule are subject to change.

Course Description

This course is the first part of a two-part series on statistics and research methods. This course is intended to introduce you to the basic and most common methods of collecting psychological data. We will cover ethics in research, the concepts of reliability, validity, generalizability, measurement, descriptive statistics, probability, Z scores, and the fundamentals of experimental design. Special attention will be given to writing in the style of the American Psychological Association (APA). The lab allows for additional time to discuss the materials covered in lecture and to work on applying what you have learned in lecture through developing a research paper. This research paper will be a hypothetical replication study. This project is also broken up into two semesters. This semester you will write a literature review, a method section and an expected results section. Each week in lab will involve working on a particular portion of your research paper. All of this will culminate in an APA style research paper.

Student Learning Outcomes

1. Learning to review the primary literature (improving library research skills, increasing familiarity with scientific writing, and reading journal articles).
2. Learning how research ideas are developed, including the formulation of testable hypotheses.
3. Analysis of research results, including a basic understanding of descriptive statistics, probability, and percentiles.
4. Produce a quality APA style.

COURSE REQUIREMENTS

Minimal Technical Skills Needed

You need to be able to use the following.

- Microsoft Office or equivalent
- PDF
- myLeo/Desire2Learn (D2L)
- Searching the internet for texts
- Using Library resources

Instructional Methods

This course is a face-to-face class. During our lecture, we will focus on deepening your understanding of the important concepts and theories through lectures, demonstrations, and class discussions. Prior to each week's lecture, you will be expected to complete the reading materials before the class.

Student Responsibilities or Tips for Success in the Course

- 1) Check and read class emails promptly for announcements, updates, clarifications, etc.

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- 2) Take notes as you listen to lectures, read the assigned parts of the textbook to check if your listening comprehension matches with the textbook descriptions, and fill in the missing pieces.
- 3) Quiz yourself often. Can you define a concept in your own words? Can you answer 3 or 4 questions of the textbook practice questions correctly?
- 4) Review the materials on a regular basis.
- 5) Complete assigned coursework on time.
- 6) Please contact me when you have questions. The material is difficult, and no one learns everything perfectly the first time through. This class, and your time, is too important for you to spend time getting frustrated instead of learning

GRADING

Final grades in this course will be based on the following scale:

A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% or Below

Your final grade is weighted 80% lecture and 20% lab. However, to receive a C or better in the course, students MUST receive a grade of C or better in BOTH the lecture and lab sections. Students who receive less than a C in either the lecture or lab will receive either an automatic D in the course, or their earned course grade if lower than D.

The lab and lecture grades are further broken up into separate assignments. The contribution of each assignment to the corresponding category (lecture or lab) appears next to each item.

Weights of the assessments in the calculation of the final letter grade.

Lecture

Exams	45%
Final exam	15%
Quizzes	15%
Exit Tickets	10%
Homework Assignments	15%
TOTAL	100%

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Lab

Lab Activities	60%
Final Paper	40%
TOTAL	100%

Makeup exams and assignments

Late submissions are not accepted for any assignments. Some assignments from each category are dropped to cover any missed assignments. The only exception to this is homework assignments, which can be submitted for 10% off for every 24-hour period they are late. There is a maximum late penalty of 50%.

Exams can be made up with a documented excuse. Makeup exams should be arranged BEFORE the exam date. In case of emergency, a makeup exam must be scheduled within 24 hours of the exam date. Failure to schedule a makeup within the 24-hour period may result in an inability to make up the exam.

If you are traveling and representing the university (e.g., band members, athletes, etc.), you need to request accommodations BEFORE the exam or assignment is due, not after.

YOU are responsible for any material you miss if you miss class. You should contact your peers and ask what you missed and ask for notes. **If we are doing an activity about something you missed, you should ask the people around you, NOT wait for me to re-teach the material you missed.**

Assessments

Lecture:

Exams: 45%

There are three exams in the course. Each exam is worth 15% of your lecture grade. Makeup exams should be scheduled as soon as possible. Preferably, this is before you miss the exam. In case of emergency, you must reach out to me to schedule a makeup within 24 hours of the missed exam. **Failure to do so may prohibit you from taking the exam.**

Final exam: 15%

There will be a cumulative final at the end of the semester covering all of the material discussed throughout the course.

Quizzes: 15%

For every topic we cover, there will be a 10-question quiz on D2L. The purpose of these quizzes is to give you practice with the material. As the goal of these is to promote

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learning, you may attempt these quizzes up to 3 times. Only your highest attempt will count. Two quizzes will be dropped at the end of the semester. Quizzes are due the day after we finish covering a topic in class.

Exit Tickets: 10%

During every class, we will have an exit ticket that you will turn in. The exact content of these will vary from seeing how you are feeling about course material to practice items to gauge your understanding. The exact timing of these tickets will vary and will **not** always be at the end of class. You must be present in class at the time of the exit ticket to receive credit. Three exit tickets will be dropped at the end of the semester.

There are no excused absences in this class. Dropped exit tickets are intended to cover a class that you need to miss for any reason. Please do not send me doctor's notes.

Homework Assignments: 15%

Before every exam, there will be a homework assignment. The purpose of these assignments is to give you practice with the types of questions that will be on the exam.

Due dates for homework assignments are listed below on the schedule of topics.

Lab:

Lab Activities (60%):

LA 1: Pick a Topic (5%) – Students must pick one of the articles from the list. This assignment is graded pass/fail.

LA 2: List of Five Articles (5%) – Students will submit a list of five articles relevant to the paper they are replicating. These articles will likely be the ones later included in your literature review. This assignment is graded pass/fail.

LA 3: Ethics Training (10%) – Students will complete the CITI ethics training. This assignment is graded pass/fail.

LA 4: Article Review Template (5%) – Students will read an article and complete the article review template. General feedback will be provided to help make sure you are on track.

LA 5: Summarize an Article (10%) – Students will summarize one of their articles and submit it for feedback. This assignment will help make sure you are summarizing and paraphrasing correctly before you go any further with your literature review. This assignment is graded pass/fail. General feedback will be provided to help make sure you are on track.

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LA 6: Literature Review Outline (5%) – Students will submit an outline for their literature review. This assignment is graded pass/fail.

LA 7: Literature Review (20%) – Students will conduct a brief APA style literature review. This will later serve as the introduction to your paper. Your paper must include 6 or more references; all should be from reputable scholarly sources and all of your references must primarily contain reports of empirical research. Note that the article you are replicating is included in this number. No secondary sources may be included. Your paper must be double-spaced in MS Word with 12 pt. TNR font and 1” margins on all 4 sides. Your paper must be 5-7 pages long (this includes your title page and reference pages). Some feedback will be provided and you are expected to make changes to the introduction of your final paper accordingly.

LA 8: Hypotheses and Expected Results section (5%) – Students will write the hypotheses and expected results section as if this were a proposal.

LA 9: Operational Definitions and Data spreadsheet (5%) – Students will list and operationally define all variables in their study. They will also create a data spreadsheet that could be used for recording data for the experiment. The purpose of this exercise is to get students thinking about what the data should look like for their project. Students will write three lines of fictitious data to aid this process. This assignment is graded pass/fail.

LA 10: Participants Section (5%) – Students will write and submit a participants section for their study. This assignment is graded pass/fail. General feedback will be provided to help make sure you are on track.

LA11: Methods Section (25%) – Students will submit their methods section, and all previous sections. Any recommended edits to the previous sections should appear in this version.

Final Paper (40%)

Paper (50%)—You will submit a final paper including all the sections completed throughout the semester (i.e., introduction, participants, methods). These should be complete **with revisions** from each of your previous submissions.

Presentation (50%)—You will be required to prepare a brief presentation summarizing the information presented in your paper.

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by East Texas A&M have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

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LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Video Conferencing Tool

https://inside.tamuc.edu/campuslife/CampusServices/CITESupportCenter/Zoom_Account.aspx?source=universalmenu

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@etamu.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, an East Texas A&M campus open computer lab, etc.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Interaction with Instructor Statement

Typically, I will respond to your emails within one business day. I can also schedule a meeting with you via Zoom. Please do not hesitate to contact me if you have any questions.

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COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Technology Policy

No technology of any kind is permitted in this class. **This includes phones AND laptops.** The only exception is if you have an accommodation letter from the student disability office with laptop use as a required accommodation. **If you use any technology in class without prior authorization, you will receive a 0 on your exit ticket for the day.**

Class Participation

Throughout the course I will offer many opportunities to participate in class. These will range from asking questions to the class to asking you to discuss an idea with your neighbors. The point of these activities is to get you thinking about the course material and identify where you may still have trouble understanding the material. I encourage you to engage in these opportunities. It is okay to be wrong on these questions. In fact, it is a good thing to make an honest response and be incorrect. This will help you identify areas you need to study more in preparation for the exam and provide cues to help you remember the correct answer. The main point I want to emphasize is that you should not be afraid to answer incorrectly during class discussions.

Class Structure

I try to utilize the entire class period. This is valuable time that you pay for! To ensure that we can utilize the entire class, **please refrain from packing up early before I have finished class.** This is distracting to other students who are paying attention and is disrespectful to me. I will respect your time by ending class on time.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct can be found at <https://www.tamuc.edu/student-code-of-conduct/>.

If you believe someone has engaged in behaviors that do not align with the Code of Student Conduct or you have other concerns, please visit the File a Report page at

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<https://www.tamuc.edu/office-of-student-rights-and-responsibilities/concerns-incident-reporting/>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

Academic Integrity

Students at East Texas A&M are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate student academic dishonesty policy

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

Undergraduate student academic dishonesty policy

[Undergraduate Student Academic Dishonesty Form](#)

Graduate student academic dishonesty policy:

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesProcedures/13students/graduate/13.99.99.R0.10.pdf>

Graduate student academic dishonesty form:

<https://inside.tamuc.edu/academics/graduateSchool/faculty/GraduateStudentAcademicDishonestyForm.pdf>

East Texas A&M Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage.

Artificial Intelligence

East Texas A&M acknowledges that there are legitimate uses of Artificial Intelligence, Chatbots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

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In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

Use of AI in this course is not permitted under any circumstances.

Students with Disabilities-- ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Services
Velma K. Waters Library- Room 162

Phone (903) 886-5930

Fax (903) 468-8148

Email: StudentDisabilityServices@etamu.edu

Website: <http://inside.tamuc.edu/campuslife/campusServices/StudentDisabilityServices/default.aspx>

Mental Health and Well-Being

The university aims to provide students with essential knowledge and tools to understand and support mental health. As part of our commitment to your well-being, we offer access to Telus Health, a service available 24/7/365 via chat, phone, or webinar. Scan the QR code to download the app and explore the resources available to you for guidance and support whenever you need it.



East Texas A&M Supports Students' Mental Health

The Counseling Center at East Texas A&M, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

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Nondiscrimination Notice

East Texas A&M will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in East Texas A&M buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and East Texas A&M Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all East Texas A&M campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

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COURSE OUTLINE / CALENDAR

Quizzes and essays are due at 11:59PM on the day they are due.

Week	Date	Topic	Assignments Due
1	8/20	Introduction to statistics	
2	8/25	Data basics	
	8/27	Graphing data	Intro to statistics quiz Due 8/28
3	9/1	Introduction to research	
	9/3	Introduction to research	Introduction to research quiz Due 9/4
4	9/8	Research ethics	Homework 1 due 9/10
	9/10	Research ethics	Research ethics quiz due 9/11
5	9/15	EXAM 1	
	9/17	Psychological measurement	
6	9/22	Psychological measurement	Psychological measurement quiz due 9/23
	9/24	Experimental research	
7	9/29	Experimental research	Experimental research quiz due 9/30
	10/1	Non-Experimental research	
8	10/6	Non-Experimental research	Non-Experimental research quiz due 10/7
	10/8	Fall break	
9	10/13	Survey research	
	10/15	EXAM 2	
10	10/20	Descriptive statistics	

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	10/22	Descriptive statistics	Descriptive Statistics quiz due 10/23
11	10/27	Normal distributions and z-scores	
	10/29	Normal distributions and z-scores	Normal distributions and z-scores quiz due 10/30
12	11/3	Probability and sampling distributions	
	11/5	Probability and sampling distributions	Probability and sampling distributions quiz due 11/11
13	11/10	One sample t-test	
	11/12	Independent samples t-test	
14	11/17	Independent samples t-test	One sample and Independent samples t-test quiz due 11/18
	11/19	No class	
15	11/24	Paired samples t-tests	
	11/26	Thanksgiving holiday	
16	12/1	Paired samples t-tests	Paired samples t-tests quiz due 4/22 Homework 3 due 12/2
	12/3	Exam 3	
17	TBA	Final Exam	

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