

Texas A&M University - Central Texas  
PSYK 335-120  
PRINCIPLES OF RESEARCH FOR THE BEHAVIORAL SCIENCES

Professor: Elizabeth K. Brown, MS, MBA

Class Times: T/Th 6:30pm-7:45pm  
Location: Founder's Hall 412  
Office Hours: as needed

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*Indicate preferred mail –Canvas “messages”. It is recommended that you keep course-related communication inside Canvas and use TAMUCT email only when Canvas is not available*

**Mode of instruction and course access:**

*Face to Face; Canvas*

**Student-instructor interaction:**

*I will check Canvas periodically throughout the week (M-F). I do not check emails/Canvas on weekends. My response time to Canvas Message is typically 12-24 hours.*

**Instructor's Personal Statement**

*As a recent student, I approach this course with a student's perspective and do my best to marry the textbook with real life situations and experience. This is a hands-on, professor led, but student directed course that provides you with relatable research knowledge. My goal is provide students with the tools to properly analyze, interpret, and critically evaluate articles, studies, and other research-related materials.*

**UNILERT**

Emergency Warning System for Texas A&M University – Central Texas

UNILERT is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in UNILERT through their myCT email account. Connect at [www.TAMUCT.edu/UNILERT](http://www.TAMUCT.edu/UNILERT) to change where you receive your alerts or to opt out. By staying enrolled in UNILERT, university officials can quickly pass on safety-related information, regardless of your location.

## COURSE INFORMATION

**Course Overview and description:** Principles of Research for the Behavioral Sciences. A study of the various research designs used in the behavioral sciences. Laboratory experiences will be required to acquaint the student with experimental procedures. Instruction will also be provided in writing research reports according to the APA manuscript style and SPSS statistical applications. Prerequisite: PSY/ENGL 309 and PSY 330 or equivalent.

### Course Objective:

The general objectives for this course are:

1. *Demonstrate factual knowledge of basic research methodology.* Students will define key terms and answer questions regarding concepts pertaining to research methodology including scientific method, theory, hypotheses, operational definitions, independent and dependent variables, research ethics, sampling, validity, reliability, confounds, between-subjects and within-subjects designs, and counterbalancing. Students will demonstrate their ability to define key terms and answer questions on Chapter Quizzes and Exams.
2. *Apply course material to improve thinking, problem solving, and decision making.* Students will apply course material to improve decision making by writing personally-relevant Discussions each week and replying to classmates. Students will use the materials and information gained from class to write in APA style 1) a complete research manuscript of an experimental study conducted in class and 2) a complete research proposal to address an original research question. Students will immediately use information covered in Lab to complete and submit weekly Lab Assignments. Students will apply course material to class participation activities. Students will use concepts taught in class while writing two peer reviews of their classmates' work at the end of the semester.
3. *Demonstrate specific skills, competencies, and points of view needed by professionals in the field.* As future professionals with a Psychology or related degree, students will need to know how to use statistical computing software to perform statistical analyses, and they will need to know how to write research reports in the style adopted by this field. Therefore, students will demonstrate their ability to perform statistical analyses in SPSS by producing and labeling SPSS output. Students will demonstrate their ability to write using appropriate APA style when writing the LOP and Proposal manuscripts.
4. *Demonstrate skill in expressing myself in writing.* Consistent with its Writing Intensive designation, students will demonstrate their skills in expressing themselves by writing weekly discussion posts, six summaries of research articles, a complete APA style manuscript of an in class experiment, an APA style proposal of original research, and peer review critiques of classmates' research. In addition, students will communicate their research ideas to others by creating a professional, conference-style presentation of their research proposal.
5. *Find resources and use provided resources for answering questions or solving problems.* Students will use the TAMUCT library website including ILLiad and psychological databases to collect research articles for their Papers and Research Proposals. Students will use the internet to research information on avoiding plagiarism. Students will use computer applications for conducting and creating research materials. Students will demonstrate their ability to find and use resources by writing reviews of articles retrieved from the library website; submitting a plagiarism

review from internet websites; and creating tables in Word, figures in Excel, data analysis in SPSS, presentations in PowerPoint, and paper reviews in TurnItIn.

**Required Reading – Textbooks and Electronic Resources:**

American Psychological Association. (2009). *Publication manual of the American psychological association* (6<sup>th</sup> ed.). Washington, DC: Author. (ISBN: 978-1-4338-0561-5)

Gravetter, F. J. & Forzano, L. B. (2016). *Research methods for the behavioral sciences*. (5<sup>th</sup> ed.). Belmont, CA: McGraw Hill. (ISBN-13: 9781305104136)

*I am using the 4<sup>th</sup> edition, so you have the choice of either the 4<sup>th</sup> or 5<sup>th</sup>.*

Green, S. B., & Salkind, N. J. (2014). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data* (7<sup>th</sup> ed). Boston: Pearson. (ISBN: 978-0-205-95860-3)

**Required Electronic Resource:**

IBM Statistical Package for the Social Sciences (SPSS) Standard GradPack v. 23. This computing software is widely used to compute statistical analyses and is available for students to use on University computers **free** of charge. If students live far from the University or do not want to use the computer lab resources, students can rent a subscription to SPSS for their personal computers at home. Students can purchase a 6-month or 12-month lease for the program via one of many online vendors. See the IBM website for a description of the product and a list of vendors:

<http://www-03.ibm.com/software/products/en/spss-stats-gradpack>

## COURSE REQUIREMENTS

### Course Requirements:

#### Research Project (715 pts)

Listed below are the tasks that we will cover in class in order to get you moving forward with your research. There are opportunities for students to present their findings at conferences in Texas and the surrounding states. More information about the conferences will be presented in class.

- 1) Topic of Interest
- 2) CITI Training (MANDATORY)
- 3) Nine Research Articles (minimum)
- 4) Purpose Statement/Hypothesis
- 5) IRB Protocol and accompanying forms
- 6) Survey Questions
- 7) Qualtrics Link
- 8) First Draft of Paper with Writing Center
- 9) Second Draft of Paper
- 10) SPSS Output in PDF
- 11) SPSS In-Class Practices
- 12) In-Class Exam
- 13) Presentation
- 14) Final Paper

Students will work individually to develop a research project based on a *quantitative* design. During research and writing on the topic, the student should seek out, identify gaps in scientific knowledge, and develop a logical, defensible rationale for a specific research project. The research project will be written in APA style and include all elements of an APA manuscript (as outlined in additional course materials). The references used in the creation of the research paper will be obtained using library research using resources available through the local library or by using the online databases discussed in class. Librarians will provide specific instruction in the effective and efficient use of the resources to individuals and to groups. Students will also be expected to develop a survey/questionnaire and to collect data, analyze the data, and write a formal report based on their findings. Additionally, you will provide me with an electronic version of your completed research project prior to your presentation (see course schedule). You are responsible for submitting the completed research project to the professor through the assignment link in Canvas. Students will be asked to submit drafts of the sections of their Research Report as indicated in the attached schedule. Drafts will be accepted earlier if ready for review. These drafts will be graded and used to allow me to give you feedback on your work. The due date for the final report is also given in the syllabus.

You will make a poster presentation of your research study to the class. You will be required to participate in the presentation in order to receive credit for the presentation. The presentation is formal and academic; therefore, students should dress, speak, and carry themselves in a professional manner. **STUDENT AFFAIRS REQUIRES A 48 HOUR NOTICE TO PRINT POSTERS. PLAN ACCORDINGLY!**

## Class Grades

### *Writing Assignments*

Full instructions will be given for each assignment as the semester progresses, but students are encouraged to ask any question at any time about any project.

All writing assignments must be submitted for plagiarism and edited by the student prior to submission of the work to the professor. Students must examine their Originality Reports and remove any content that is identical to another work. **Students are not allowed to quote or use close paraphrases for any writing assignment in this course.** If students have content that is identical to another work, students will not be credited for the assignment.

## Grading Criteria Rubric and Conversion

Graded Assignments	Points	%of Overall Grade
Topic of Interests	10	1.40%
CITI Training	30	4.20%
Articles 1-3 & Reference Page	25	3.50%
Articles 4-6 & Reference Page	25	3.50%
Articles 7-9 & Reference Page	25	3.50%
Purpose Statement & Hypothesis	15	2.10%
IRB & Consent Form	50	6.99%
Survey Questions	50	6.99%
Qualtrics Link	10	1.40%
First Draft Paper (Writing Center)	50	6.99%
Second Draft Paper	50	6.99%
SPSS PDF Output	25	3.50%
In Class Exam	100	13.99%
SPSS Practices 1-4	50	6.99%
Presentation	100	13.99%
Final Paper	100	13.99%
<b>Total Points</b>	<b>715</b>	<b>100.00%</b>

**Posting of Grades:**

- All student grades should be posted on the Canvas Grade book and students should monitor their grading status through this tool.
- Grades will posted within one week of submission at the latest

<u>Grade</u>	<u>University Definition</u>	<u>Percentage</u>
A	Excellent	90-100
B	Good	80-89
C	Fair	70-79
D	Passing	60-69
F	Failing	59 or below

**TECHNOLOGY REQUIREMENTS AND SUPPORT.**

**Technology Requirements.**

This course will use the TAMUCT Canvas Learn learning management system.

Logon to <https://tamuct.instructure.com> to access the course.

Username: Your MyCT username

(xx123 or everything before the "@" in your MyCT e-mail address)

Initial password: Your MyCT password

Check browser and computer compatibility by using the "Test Your Browser" button, found in the "Check Your Browser" module on your Canvas dashboard, once you have logged in.

**Technology Support.** For technology issues, students should contact Help Desk Central.

24 hours a day, 7 days a week:

Email: [helpdesk@tamu.edu](mailto:helpdesk@tamu.edu)

Phone: (254) 519-5466

Web Chat: <http://hdc.tamu.edu>

*When calling for support please let your support technician know you are a TAMUCT student.*

For issues related to course content and requirements, contact your instructor.

*Technology issues are not an excuse for missing a course requirement – make sure your computer is configured correctly and address issues well in advance of deadlines.*

**COURSE OUTLINE AND CALENDAR**

**Complete Course Calendar**

Date	Tuesday- Research	Thursday- APA/SPSS	Assignments Due Sunday Midnight
Week 1	Intro/Syllabus/Groups	CITI/Concept Map/Questions	CITI/Topic of Interest/Group
Week 2	Hypothesis/Variables/Purpose Statement	Articles 101/ Journal Databases	Articles 1-3 & Reference Page/Hypothesis/Purpose Statement
Week 3	Ethics/Participants	PsychTEST/Reliability & Validity	Articles 4-6 & Reference Page
Week 4	IRB Forms/Consent Forms	Survey Questions/Concept Map	Articles 7-9 & Reference Page/IRB/Consent Form
Week 5	Review Survey in Groups	Qualtrics Intro	Survey Questions/ Complete Concept Map
Week 6	Pilot Qualtrics & Feedback ((IRB Submission))	Complete Qualtrics Revisions	Qualtrics Link
Week 7	<a href="#">Paper- Abstract/Introduction</a>	Paper- Methods/Participants	
Week 8	Paper-Materials/Procedure	Paper-Results	Midterm in Class (Tues/Thurs)
Week 9	Paper-Discussion/Limitations	SPSS Intro	First Draft Paper Due
Week 10	SPSS Practice- Cleaning	SPSS Practice- Recoding	
Week 11	SPSS Practice- Descriptives/Crosstabs	SPSS Practice- t-test	
Week 12	Data Export- Clean and Recode	Data Analysis- Descriptives	Second Draft Paper Due

Week 13	Data Analysis-t-test	THANKSGIVING	
Week 14	Data Analysis-Crosstabs	Data Analysis	SPSS Output (pdf)
Week 15	Work on Paper/Poster	Work on Paper/Poster	Poster Submitted to Student Affairs
Week 16	Paper/Poster Presentation- Open to Friends & Family	NO CLASS	

## COURSE AND UNIVERSITY PROCEDURES AND POLICIES

**Drop Policy.** If you discover that you need to drop this class, you must go to the Records Office and ask for the necessary paperwork. Professors **cannot** drop students; this is always the responsibility of the student. The record's office will provide a deadline for which the form must be returned, completed and signed. Once you return the signed form to the records office and wait 24 hours, you must go into Warrior Web and confirm that you are no longer enrolled. Should you still be enrolled, FOLLOW-UP with the records office immediately? You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the deadline or fail to follow the procedure, you will receive an F in the course.

**Academic Integrity.** Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

**Disability Support and Access Services.** At Texas A&M University – Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to an education that is barrier-free. The Office of Disability Support and Access is responsible for ensuring that students with a disability enjoy equal access to the University's programs, services and activities. Some aspects of this course or the way the course is taught may present barriers to learning due to a disability. If you feel this is the case, please contact Disability Support and Access at (254) 501-5831 in Warrior Hall, Ste. 212. For more information, please visit their website at [www.tamuct/disabilitysupport](http://www.tamuct/disabilitysupport). Any information you provide is private and confidential and will be treated as such.

**Tutoring.** Tutoring is available to all TAMUCT students, both on-campus and online. Subjects tutored include Accounting, Finance, Statistics, Mathematics, and Writing, and APA formatting. Tutors are available at the Tutoring Center in Warrior Hall, Room 111. Visit [www.ct.tamus.edu/AcademicSupport](http://www.ct.tamus.edu/AcademicSupport) and click "Tutoring Support" for tutor schedules and contact information. If you have questions, need to schedule a tutoring session, or if you are interested in becoming a tutor, contact Academic Support Programs at 254-501-5830/5836 or by emailing [Cecilia.morales@ct.tamus.edu](mailto:Cecilia.morales@ct.tamus.edu) Chat live with a tutor 24/7 for almost any subject on your computer! Tutor.com is an online tutoring platform that enables TAMUCT students to log-in and receive FREE online tutoring and writing support. This tool provides tutoring in Mathematics, Writing, Career Writing, Chemistry, Physics, Biology, Spanish, Calculus, and Statistics. To access Tutor.com, log into your Canvas account and click "Online Tutoring."

**University Library.** The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 72,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at TAMUCT are available through our website to help students navigate these resources. On-campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available twenty-four hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the TAMUCT main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our homepage: <http://www.tamuct.edu/departments/library/index.php>