

ANGELO STATE UNIVERSITY

PSY 6314 Research Methods

Spring 2022

Leslie James Kelley, Ph.D.



COURSE NUMBER**PSY 6314.D10****COURSE TITLE****Research Methods and Statistical Analysis****CREDITS****Three Semester Credit Hours (3-0-0)**

Online Class: Meets completely online using Blackboard

Prerequisite / Co-Requisite Courses

None

Pre-requisite Skills

Accessing internet web sites, use of ASU Library resources, and proficiency with Microsoft Word and/or PowerPoint are expectations of the Archer College. Computer access requirements are further delineated in the Undergraduate Handbook. Tutorials for ASU Library and for Blackboard are available through RamPort. The ASU Undergraduate/Graduate Student Handbook should be reviewed before taking this course: <https://www.angelo.edu/student-handbook/>

Course Delivery

This is an online course offering. The course will be delivered via the Blackboard Learning Management System. The course site can be accessed at <http://blackboard.angelo.edu>

FACULTY**Leslie Kelley, Ph.D.****Dept. Office:** ADM 204H**Dept. Phone:** (325) 486-6167**Fax:** (325) 942-2236**Email:** Leslie.Kelley@angelo.edu**OFFICE HOUR**

Online: T/Th 10:00am-12:00pm

In Office: W 11:00am-12:00pm

COURSE DESCRIPTION

An in-depth treatment of non-experimental, quasi-experimental, and true experimental (or randomized) designs focusing on advantages and disadvantages of each. Special emphasis is placed on how the various research designs are related to generalized causal inference and the common misinterpretations connected with these inferences and associated statistical analyses.

COURSE OVERVIEW

Tentative Course Schedule

Topic & Required Reading	General Description of Subject Matter *Assignments Due*
1/18-1/21: Chapters 1 & 2	*DUE Jan. 20th by 11:59 PM* <ul style="list-style-type: none">● Review START HERE page● Review Course Syllabus and ASU Honor Code. Select “Mark Reviewed” to agree to terms of the course and ASU’s policies and access course content. Foundations of Design & Analysis, The Scientific Method, Quantitative & Qualitative Research, Ethical Research *Introductory Discussion Board due 1/20*
1/24-1/28: Chapters 3 & 4	Research Designs & Variables Sampling from a Population
1/31-2/4: Chapter 5	One-Way Chi-Squared (1 Variable (IV) with Frequency Data) *Quantitative Research Proposal Due 2/3 – Follow steps 1-3 in your textbook on pp. 2 – 8* What would you like to research? How would go about defining and measuring your variables? Follow APA Guidelines in your textbook for your methods section (and in Appendix C) After approval from your professor, follow your procedures! You must collect data to analyze for the next section of your paper!
Wednesday, February 2nd	Census – Official Date of Record (“W” period starts 2/3)
2/7-2/11: Chapter 6	Two-Way Chi-Squared (2 IVs with Frequency Data) *Analysis Assignment #1 Due 2/10*
2/14-2/18: Chapter 7	Research without Grouping: Correlation
2/21-2/25: Chapter 8	Research without Grouping: Scale Development
2/28-3/4: Chapter 9	Research without Grouping: Prediction *Analysis assignment #2 Due 3/3*
3/7-3/11: Chapter 10	Independent-Samples T-test One IV with Two Independent levels/groups
3/14-3/18	University Closed for Spring Break

3/21-3/25: Chapter 11	One-Way Between-Groups ANOVA One IV with more than Two Independent levels/groups *Analysis assignment #3 Due 3/24*
3/28-4/1: Chapter 12	Related-Samples and Matched-Pairs t-tests One IV with Two Related levels/groups
4/4-4/8: Chapter 13	One-Way Repeated-Measures ANOVA One IV with Repeated-Measures: More than Two Groups *Analysis Assignment #4 Due 4/7*
Thursday, April 28th	Last day to Withdraw from Class ("W" period ends)
4/11-4/15: Chapter 14	Two-Way Between-Groups ANOVA Two IVs with Independent Samples *Quantitative Research Paper – Results Section Due 4/14* Follow APA Guidelines in your textbook (and in Appendix C) Turn in your SPSS Analysis Output with your Results Section written in APA format
4/18-4/22: Chapter 14	Review Chapter 14 *Non-Analysis Assignment #5 Due 4/21*
4/25-4/29: Appendix C	Review professor comments on assignments, read textbook on APA style & Appendix C for paper
5/2-5/6: Chapters 1-14	*Final Write-up for Quantitative Research Paper Due 5/5* Write an Intro and a Discussion section. Correct and Conjoin your Literature, Methods, and Results sections to your Intro and Discussion sections, Cover Page and Reference page for your finished paper. Follow APA guidelines throughout your textbook (for results) and especially see Appendix C
5/9-5/13: Final Exam Week	*Have a Great Final Exam Week*

STUDENT LEARNING OUTCOMES

Student Learning Outcome By completing all course requirements, students will be able to:	Assignment(s) or activity(ies) validating outcome achievement:
Understand basic non-experimental, quasi-experimental, and experimental research designs and develop a rationale for choosing appropriate statistical tests for analyzing data from these designs	Readings, assignments, & exams
Understand how to conduct several basic statistical analyses using a current statistical package	Readings, assignments, & exams
Recognize and understand important statistical and methodological concepts such as experimental control, reliability/validity, central tendency, variation, and inferential testing	Readings, assignments, & exams

Interpret statistical and methodological information from research studies and other data	Readings, assignments, & exams
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Required Texts and materials

Wilson, J. H. & Joye, S. W. (2017). Research methods and statistics: An integrated approach
ISBN: 978-148-339-2141

IBM SPSS Statistics GradPack (Standard) – Version 23-26. Examples from your textbook are drawn from version 23. You can download this software for approximately \$50-\$70 (6-month license) through affiliates of IBM by [clicking here](#). Additionally, you may purchase the software through Amazon and other online sources. You will need the Standard version of SPSS for this class. The Base version does not have all of the analyses you will need for this class, and the Premium version has more than you need. Please note that examples from Wilson & Joye are drawn from version 23, and other versions may look slightly different.

OTHER REQUIRED MATERIALS

- Computer with MAC or Windows Operating System
- High Speed Internet Access
- Ethernet Cable
- Webcam (**Please note:** a plug-in webcam allows the student to perform thorough environmental scans).

Grading System

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

A = 90%-100%

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = Below 60%

Evaluation and Grades

Graded assignments, activities and percent of the overall course grade:

Grades:

1 Quantitative Research Paper: (40pts)

Proposal, Lit. Review & Methods Section (15pts)

Results Section (10pts)

Final Paper (15pts)
5 SPSS Assignments: (60pts - 12pts each)
Introductory Discussion Board (2pts – extra credit)
Total Possible Grade: 102%

TEACHING STRATEGIES

- Lectures, Videos, PowerPoint, and Skill-based Tutorials

Students are expected to be “active learners.” It is a basic assumption of the instructor that students will be involved (**beyond the materials and lectures presented in the course**) discovering, processing, and applying the course information using peer-review journal articles, researching additional information and examples on the Internet, and discussing course material and clinical experiences with their peers.

ASSIGNMENT/ACTIVITY DESCRIPTIONS

Extra Credit (2%): There will be an introductory lecture activity and discussion board, which will not be required for the class, but will be worth up to (an additional) 2% toward your overall grade. It's an easy and fun assignment, so – you should do this! This is the only extra credit offered over the course of the semester.

SPSS Assignments (60%): There will be 5 SPSS assignments, each worth 12% of your overall grade. For these assignments, you will need to follow the directions in blackboard, and carefully apply the knowledge that you have learned in regard to the weekly lessons and readings to choose an appropriate research design and appropriate statistical tests for analyzing data provided for the assignment. Specifically, you will run analyses using SPSS (versions 23-26). You will need to purchase and download an SPSS grad pack – standard version (\$50-\$70) or use SPSS on campus at a computer lab where it is available. SPSS (v. 23) analyses are thoroughly described in your textbook, to provide you with clear examples of how to complete these assignments. You will upload your work into a format designated in Blackboard. You should look at the format for uploading your work, before you begin the assignment, so that you can be sure to include all of the required elements.

Quantitative Research Paper (40%): You will write 1 quantitative research paper over the course of the semester, in three separate submissions, the last of which will be the final product for your paper. Please be sure to follow the examples for writing a research paper in APA format from your textbook closely. This will be a mock-study in which you collect data from friends and family, fellow students, and acquaintances. We will not use the SONA system to collect data and you should not collect data from individuals you do not know or from children, the elderly, individuals with disabilities, or any other population that could be considered vulnerable or at risk of being exploited. This project can be used as a dry run, so-to-speak, for a thesis or research project that you may complete at a later time, and can help you work out kinks that you may not have thought about.

Submission #1: Research Proposal & Methods Section (15%)

For your **Research Proposal**, you will complete research steps 1-3 of chapter 1 in your text (p. 3-8). Be sure to follow the first three steps of the scientific method closely for your research proposal, and to include clear operational definitions of all your variables. While step two in your book tells you to look at approximately 50 titles, which is a great suggestion for an actual research study, for this assignment, you should include a 2-3 sentence description for at least 10 articles relevant to the study you are proposing. You will expand these descriptions for your final paper into a short literature review section. You should also list these resources in an APA format reference list. Be sure to look at research that has attempted to measure the same (or similar) variables that you are measuring, and you may be able to find and use assessment tools that have already been constructed and validated.

You will need to be sure to clearly state your hypothesis, and be sure that your hypothesis is based on solid theory, and most importantly that it is testable and falsifiable. Next you will create a method for measuring your variables by determining which research design and analysis will best fit with your study. It's very important to keep your study simple, so that you will be able to collect and analyze your data in the time frame for this assignment. And remember – "Research is a marathon, not a sprint!" Do not try to measure everything you're interested in about a topic. This whole study is only one leg of the marathon, and you can add more to it later, if you so choose. Keep in mind that more variables often means more complex statistical analysis, and two or three variables is sufficient for this project. Five is too many.

For your **Methods Section**, you will create a detailed research method to measure your variables. This section should include a description of your (proposed) research participants, and materials and procedure. See appendix C & the section of the textbook devoted to the research design and analysis that you plan to use, for examples of how to write a methods section. Be aware that you will update this section for the final draft of your paper, to reflect your actual research participants, and any changes that you may have made to your procedures prior to collecting data. You will also need to include an informed consent form with the Methods section of the assignment, based on directions from chapter 2 (p. 25-26) of your textbook.

Most importantly, you need to formally write an APA formatted Methods section, which will serve as the methods section of your overall paper. This methods section should describe exactly how you are going to measure your variables, and how you are going to collect your data, such that reader knows exactly what you are doing, step-by-step, in your study.

To ensure that you are collecting data in an appropriate manner to statistically analyze the data for the next submission of your paper, please write a short paragraph (2-3 sentences) after your methods section to indicate which statistical test (e.g., chi-square, correlation, t-test, ANOVA, etc.) that you plan to use to analyze your data and why you think it is an appropriate analysis for your project. I will provide feedback to help you, if there is a more appropriate analysis.

NEXT: COLLECT AND ANALYZE YOUR DATA. You should plan to collect data from approximately 25-50 participants, but you may collect more. Do not begin collecting data before you have received approval from me indicating that you may proceed. Data collection should be limited to friends and family as this is a mock (not real) research study, and results cannot be disseminated or shared with others (including participants).

Submission #2: Results Section (10%)

For your **Results Section**, which you can only write after collecting and analyzing your data, you will need to turn in your SPSS output, along with your results section, written in APA format. See appendix C & the section of the textbook devoted to the research design and analysis that you plan to use, for examples of how to write a results section. Your results section should be written in the specific format that is required for the specific research design and analysis you conducted for your project, and should include all of the statistical information to allow your reader to know the outcome of your study, in relation to the variables/hypotheses that you previously proposed that you would be measuring.

Submission #3: Final Paper (15%)

For your **Final Paper**, you will add an Intro and a Discussion section to the sections you've already written. You do not need to include an abstract. Correct and Conjoin your Literature section, Methods, and Results sections to your Intro and Discussion sections. Expand your Literature Section and update your reference list for your finished paper, if needed. Create a cover page and be sure that your paper is appropriately cited (throughout) in APA format. Follow APA guidelines throughout your textbook (for all sections) and especially be sure to look closely at Appendix C for complete examples.

General Policies related to this course

All students are required to follow the policies and procedures presented in the following documents:

- Angelo State University Student Handbook located on the ASU website: [Angelo State University's Student Handbook](#)

STUDENT RESPONSIBILITY & ATTENDANCE

ON-LINE: This class is asynchronous, meaning you do not have to be on-line at a certain time. There are readings which you will have to complete to be able to adequately participate in individual and group assignments. In order to complete this course successfully, you do have to participate in all course activities, e.g., discussion boards, course projects, reflective logs, etc. Students are expected to engage in course activities and submit work by due dates and times. The hope is that students will make substantive contributions which reflect integration of assigned materials as well as any outside readings as appropriate. Scholarly contribution is an

expectation. For planning purposes, this class will probably require a minimum of 6-9 study hours per week on average.

COMMUNICATION

I will respond to email and/or telephone messages within 24-48 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday.

Students are encouraged to email the instructor if they have any questions or concerns. When emailing the instructor, please include your class name and time (or "Online") in the subject line (for example, Stats, Online). **Please be respectful in your emails.** This includes addressing the professor properly and signing your full name. If you would like to meet virtually or by phone with the instructor, please approach it this way: send an email requesting a meeting, and give *three* possible options, in terms of days *and* time slots that work for you.

Written communication via Blackboard: It is an expectation of this class that you use formal writing skills giving appropriate credit to the source for your ideas. Follow APA (2010) 6th edition (2nd Printing or higher only) guidelines for referencing.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check frequently for announcements and policy changes.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone, Skype, or another virtual program.

Assignment Submission

All assignments **MUST** be submitted through the Assignments link in the Blackboard course site. This is for grading, documenting, and archiving purposes. Issues with technology use arise from time to time. If a technology issue does occur regarding an assignment submission, email me at Leslie.Kelley@angelo.edu and attach a copy of what you are trying to submit. Please contact the IT Service Center at (325) 942-2911 or go to your Technology Support tab to report the issue. This lets your faculty know you completed the assignment on time and are just having problems with the online submission feature in Blackboard. Once the problem is resolved, submit your assignment through the appropriate link. This process will document the problem and establish a timeline. Be sure to keep a backup of all work.

LATE WORK OR MISSED ASSIGNMENTS POLICY

Attendance/Make-Up Policy: Attendance/Participation is required for this online course. The course is set up on weekly modules. The week begins on Monday and ends on Friday. Assignment due dates are shown on the calendar/schedule or posted within Blackboard.

Assignments are open for approximately one week. Exams are open for two days, and the lowest of your exams is dropped. There will be No makeup exams *except* in cases of serious illness or some other serious event directly preventing you from taking the exam. In these instances, you must obtain a note from your physician or the dean, and present it to the instructor. The instructor will determine if a student will be allowed to make-up the assignment. If permitted to make-up an exam, you will have **24 hours** to make-up the missed exam and failure to do so will result in a zero. Exams must be taken on the assigned day(s) and within the assigned times. I must know no later than 1 week in advance if circumstances may prevent you from taking an exam at the specified time.

General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- [Angelo State University Student Handbook](#)ⁱ
- [Angelo State University Catalog](#)ⁱⁱ

Student Responsibility and Attendance

Online: This class is asynchronous, meaning you do not have to be on-line at a certain time. There are readings which you will have to complete to be able to adequately participate in individual and group assignments. In order to complete this course successfully, you do have to participate in all course activities i.e. discussion boards, course projects, reflective logs, etc. Students are expected to engage in course activities and submit work by due dates and times. The hope is that students will make substantive contributions which reflect integration of assigned materials as well as any outside readings as appropriate. Scholarly contribution is an expectation. For planning purposes, this class will probably require a minimum of 6-9 study hours per week on average.

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Health and Human Services adheres to the university's [Statement of Academic Integrity](#).ⁱⁱⁱ

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the [Student Disability Services website](#).^{iv} The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu

Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)^v for more information.

Plagiarism

Plagiarism at ASU is a serious topic. The Angelo State University's Honor Code gives specific details on plagiarism and what it encompasses. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word for word without quotation marks and the source of the quotation. We use the *APA Style Manual of the American Psychological Association* as a guide for all writing assignments. Quotes should be

used sparingly. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Bb Safe Assignment or Turnitin. Resources to help you understand this policy better are available at the ASU Writing Center: [ASU Writing Center](#).^{vi}

Student Absence for Observance of Religious Holy Days

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)^{vii} for more information.

Copyright Policy

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

Syllabus Changes

The faculty member reserves the option to make changes as necessary to this syllabus and the course content. If changes become necessary during this course, the faculty will notify students of such changes by email, course announcements, or via a discussion board announcement. It is the student's responsibility to look for such communications about the course on a daily basis.

Title IX at Angelo State University

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Boone, J.D. You may submit reports in the following manner:

Online: www.angelo.edu/incident-form

Face to face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.boone@angelo.edu

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: www.angelo.edu/title-ix.

Student Evaluation of Faculty and Course

Students in all programs are given the opportunity to evaluate their courses and the faculty who teach them. Evaluations are most helpful when they are honest, fair, constructive, and pertinent to the class, clinical experience, or course. Faculty value student evaluations, and use student suggestions in making modifications in courses, labs and clinical experiences.

Angelo State University uses the IDEA (Individual Development and Educational Assessment) system administered through Kansas State University for all course evaluations. The Office of Institutional Research and Assessment administers IDEA for the entire university, online and has established a policy whereby students can complete course evaluations free from coercion.

End of Syllabus

ⁱ <https://www.angelo.edu/student-handbook/>

ⁱⁱ <https://www.angelo.edu/catalogs/>

ⁱⁱⁱ <https://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>

^{iv} <https://www.angelo.edu/services/disability-services/>

^v <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>

^{vi} https://www.angelo.edu/dept/writing_center/academic_honesty.php

^{vii} <https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>
