



SWK 595: Research Literature and Techniques in Data Analysis for Social Work

*Techniques in Data Analysis

COURSE SYLLABUS: SPRING 2025

This syllabus is tentative and may change up until the first class meeting.

INSTRUCTOR INFORMATION

Instructor: Dr. Marcella Smith

Office Location: Henderson 311

Office Hours: Mondays (Dallas) & Tuesdays & Thursdays (Commerce) 10:00 a.m.-3:00 p.m. and by appointment Office Phone: 903-468-8190

Office Fax: 903-468-3221

University Email Address: Marcella.Smith@tamuc.edu

Preferred Form of Communication: **Email**

Communication Response Time: within 2 business days

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook(s) Required: Farmer, A.Y. and Farmer, G.L. (2021). *Research methods for Social Work: A problem-based approach*. Los Angeles, CA. **(Same text used in SWK 590)**

Publication manual of the American Psychological Association (2019) 7th ed.
Washington, DC: American Psychological Association

Software Required: Microsoft EXCEL

Optional Texts and/or Materials

All MSW students need to purchase the following set of study materials to prepare for the Graduate Comprehensive Exam that they will take in their final semester. You must pass the exam to receive your degree. It is never too early to begin studying for the exam.

**Comprehensive Study Guide (Masters, Clinical, Adv. Generalist) Version 9.0.
Social Work Examination Services.**

[www.https://swes.net/studymaterials/comprehensive-study-guide-lmsw/](https://swes.net/studymaterials/comprehensive-study-guide-lmsw/)

Course Description

- This course provides instruction in data analysis using Microsoft Excel program. Students learn how to calculate descriptive statistics, t-Tests, ANOVA, and ChiSquare. Emphasis is placed on interpreting and reporting results of data for purposes of disseminating information and informing program/practice decisions

Prerequisite: SWK 595 is the second half of the research series for the AGP MSW program and students must take it sequentially in the semester immediately following their successful completion of SWK 590.

Relationship to Other Courses:

Student Learning Outcomes (Should be measurable; observable; use action verbs)

Council on Social Work Education (CSWE) requires a competency-based approach to identify and assess what students demonstrate in practice. In social work, this approach involves assessing students' ability to demonstrate the competencies identified in the educational policy. Listed below are the competencies and associated knowledge, skills, values and/or cognitive and affective processes that comprise the expected outcomes for this course.

	Assignment/Assessment	Dimension
Competency 4: Engage in Practice-Informed Research and Research-Informed Practice		
Apply advanced level critical thinking to engage in analysis of quantitative and qualitative research methods and research findings	<i>weekly homework assignments, mid-term and final exams</i>	Skills, Cognitive - Affective Process
<ul style="list-style-type: none"> Integrate and adapt research evidence to inform and improve practice, policy, and service delivery across the rural/urban landscape. 	<i>weekly homework assignments, mid-term and final exams</i>	Skills, Cognitive - Affective Process
Competency 9: Evaluate Practice with Individuals, Families, Groups, Organizations and Communities <i>as demonstrated by successful completion of weekly homework assignments; mid-term and final exams</i>		
<ul style="list-style-type: none"> Critically analyze, appraise, and evaluate intervention and program processes and outcomes in both urban and rural environments and the intersection of both. 	<i>weekly homework assignments, mid-term and final exams</i>	Skills, Cognitive - Affective Process

<ul style="list-style-type: none"> Apply evaluation findings to improve practice effectiveness at the micro, mezzo, and macro levels across the landscape of rural/urban and at the intersection of the two environments. 	<i>weekly homework assignments, mid-term and final exams</i>	Skills, Cognitive - Affective Process
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COURSE REQUIREMENTS

Minimal Technical Skills Needed

In this class you will utilize the Learning Management Systems (LMS) D2L for instructional and learning opportunities, submitting your assignments, participating in online synchronous and asynchronous discussions, accessing resources, and completing quizzes/tests. Additionally, knowledge and skills in using Microsoft Word PowerPoint and Outlook Email, if you have any issues with using the various systems or software, it is your responsibility to contact support services and to notify the instructor of the problem.

Instructional Methods

This course will be delivered via synchronous and asynchronous sessions via D2L and will consist of live class sessions, pre-recorded lectures, group engagement activities, various assignments with some including experiential learning and practical application of the content areas. In addition, small lectures, discussion activities and workshops may be utilized to provide instruction during this course.

Student Responsibilities or Tips for Success in the Course

As a student in this course, you are responsible to engage in active learning and reaching out to the instructor if there are problems or challenges that is interfering in optimal learning. Communication is key when engaged in a fully online, virtual environment.

Expectations for success include:

1. Always demonstrate professional behavior, including demonstrating respect for instructor and peers; being open to feedback and guidance throughout this class and in the program.
2. Adhered to the School of Social Work and University student code of conduct, along with NASW Code of Ethics.
3. Begin reading the assigned text and supplemental readings as soon as possible, with a focus on completing all readings prior to engagement with instructor or peers.
4. Prepare to engage in live class sessions, discussions, and other activities so you can be a contributor as well as receiver of knowledge and skills.
5. Actively participate in engagement activities which will include live virtual class sessions, online discussions, and interactive learning opportunities -as this is vital for learning and success in both this course and the program.
6. Work ahead when possible, completing assignments ahead of due date so you are prepared to submit on the due date.
7. Sign into the D2L course multiple times during the week to access updated announcements or posted resources.
8. Check your university email daily. This is the official method of communication by the university, department, and instructor.
9. Be open and focused on the “process” and not the “product” as earning this degree requires time, effort, work and ultimately growth in knowledge, skills, abilities along with personal and professional attributes.

GRADING

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

A = 90%-100% of total points

B = 80%-89%

C = 70%-79%

D = 60%-69%

F = 59% or Below

Assessments

1. Weekly Assignments (25 % of final grade)
Students will complete various statistical assignments designed to teach and reinforce basic statistical concepts related to both descriptive and inferential statistical analysis
2. Mid-Term Exam (30% of final grade) Students will be provided a set of data with instructions to complete a statistical analysis and write a results report.
3. Final-Exam (45% of final grade) Students will be provided a set of data with instructions to complete a statistical analysis, write a results report and make a recommendation for a program based on results of data.

Due Date Policy

- 1) Late assignments will have an automatic 15-point deduction.
- (2). ALL written assignments will be submitted in the correct folder, online in Bright Space D2L by the due date and time. DO NOT email an assignment to me unless you have issues submitting it in D2L. You may email it to meet the due date but will still be required to submit it to Bright Space once the issue is resolved. In the hordes of emails, I receive daily, many get lost. It is your responsibility to know how and if your computer software is compatible with Bright Space D2L for uploading assignments.

TECHNOLOGY REQUIREMENTS

LMS

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

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@tamuc.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, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

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

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>

Interaction with Instructor Statement

If you have any questions or are having difficulties with the course material, please contact your instructor via email. Instructor will respond to email queries within two business days

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

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 is described in detail in the [Student Guidebook](#).

<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

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>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at East Texas A&M University-Commerce 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 Academic Dishonesty 13.99.99.R0.03](#)

[Undergraduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/documents/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf>

[Graduate Student Academic Dishonesty Form](#)

<http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonestyFormold.pdf>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

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 Resources and Services

East Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

East Texas A&M University-Commerce 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 University-Commerce 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 A&M-Commerce 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 A&MCommerce campuses. Report violations to the University Police Department at 903886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, 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

School of Social Work and Council on Social Work Education Specific Policies

Course Engagement

Final Evaluation and Grade Depends on both Classroom attendance and Participation
Inadequate participation or lack of required time commitment in each class significantly affects students' grades. No matter the course venue, students must engage in a comparable amount of time. Expectations of both Face-to-Face classes and those with Online components include time spent reading and studying course material.

To earn a level of competency within a specific course, students must demonstrate both mastery of content and active engagement.

Mastery of content areas is evidenced by successful completion of course assignments such as written papers, group project deliverables, tests/quizzes and other tangible products designed by instructors to evaluate knowledge and skills.

Additionally, the Social Work Profession is built upon human interactions and building human relationships – which is defined as engagement. Engagement is defined as meaningful involvement in interactions with instructor, peers, outside stakeholders as appropriate (such as contacting a social worker to interview for a required assignment). Within the classroom setting, whether virtual or F2F, students must actively participate in 80% of engagement activities as outlined by individual instructors. These activities may include, but are not limited to participation in live, synchronous virtual classes, attending a Face-to-Face course when appropriate, interacting with peers in posted discussions and collaborating in group interactive projects.

Students must meet standards for content mastery on tangible assignments and meet the threshold of active engagement of the time set during a semester by the instructor.

Instructors are experts in each course content area and set the standards for students to meet for successful completion of the course.

Student Conduct

Students preparing to become professional social workers must adhere to the *University Code of Conduct, Department Code of Conduct and National Association of Social Workers' (NASW) Code of Ethics*.

Department Code of Conduct

"Faculty have the authority to request students who exhibit inappropriate behavior to leave the class/lab/internship practicum or to block access to online courses and may refer offenses to the [Academic and Professional Issues Committee (API)] or to the Department Head. More serious offences by be referred to the University Police Department and/or the Judicial Affairs Office for disciplinary action" (Student Guidebook p 35)

Social Work students conduct themselves in an ethical and professional manner.

Closely linked with professional recognition is the social worker's compliance with the

profession's ethical standards. It is imperative for professional social workers to be competent and ethical in practice if the profession is to maintain the public trust. It is essential that each social work student gain a thorough understanding of the ethical principles that guide practice and actively demonstrate in behavior, both in and out of the classroom. Student conduct is to reflect the tenets of *NASW Code of Ethics* (located at <https://www.socialworkers.org/pubs/code/code.asp>) on the NASW website: <https://www.socialworkers.org>

University Code of Conduct *located in the Student Guidebook at* <http://www.tamuc.edu/campuslife/documents/studentGuidebook.pdf> (pp 34- 66). On the University Website under Campus Life Documents
To become aware of university policies related to student academic and behavioral expectations for students refer to the Guidebook

Appendix A
Grading Rubric for Homework, Mid-Term and Final Exam

	Does Not Meet Expectations 0-69% of pts available	Meets Expectations 70-89% of pts available	Exceed Expectations 90% or greater of pts available
Calculations	Incorrect statistical test chosen, Calculations are incorrect (final answer)	Correct statistical test chosen Calculations are correct, but final answer may be incorrect due to errors in entering data etc	Correct Statistical Test Chosen, Calculations correct, final answer correct and presented in organized manner on Excel sheets
Writing Results	No written interpretation presented, or incorrect interpretation	Written interpretation presented; most format correct for scientific information/APA	Written interpretation presented is correct, required scientific format and APA requirements

COURSE SCHEDULE

School of Social Work
SWK 595: RESEARCH LITERATURE AND TECHNIQUES
Spring 2025

Week Dates	Topic	Reading Assignments	ASSIGNMENT
Week 1: Jan 13	Introduction; Review Course Syllabus and Concepts from Fall 2024		
	Statistics or Sadistic? It is up to you	Handouts provided	
<p>With successful engagement of week 1 content and completion of homework students will be able to:</p> <ul style="list-style-type: none"> • Explain what statistics is about • Describe why social work students should take statistics • Understand how to succeed in this course • Complete basic mathematical computations in Excel 			
Week 2: Jan 20	Variables and Excel Tips and Techniques		Homework #1 Due no later than 11:59 p.m. on 1/26

With successful engagement of week 2 content and completion of homework students will be able to:

- Explain the difference between formulas and functions in excel •
- Create and use a formula

- Describe the important Excel functions (including sorting; pivot tables etc)
- Understand how to select and use a function
- Compute and Describe Sample Data

Week 3 Jan 27	Variables, Excel Tips, and Techniques continued.	Handouts provided	ASSIGNMENT Homework #2 Due no later than 11:59 p.m. on 2/2
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With successful engagement of week 3 content and completion of homework students will be able to:

- Explain the difference between formulas and functions in excel
- Create and use a formula
- Describe the important Excel functions (including sorting; pivot tables etc)
- Understand how to select and use a function
- Compute and Describe Sample Data
- Describe pivot tables and how to use them

Week 4 Feb 3	Measures of Central Tendency; Frequency Distributions	Handouts provided	Assignment Homework #3 Due no later than 11:59 p.m. on 2/9
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With successful engagement of week 4 content and completion of homework students will be able to:

- Explain measure of central tendency
- Compute the mean for a set of scores using the AVERAGE function
- Compute the mode for a set of scores using the MODE function
- Compute the median for a set of scores using the MEDIAN Function
- Use the Analysis ToolPak to compute descriptive statistics
- Select the appropriate measure of central tendency to describe variables

Week 5 Feb 10	Frequency Distributions: A tool to organize data		Assignment Homework #4 Due no later than @11:59 p.m. on 2/16
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With successful engagement of week 5 content and completion of homework students will be able to:

Week 6 Feb 17	MIDTERM EXAM Due 2/23		
Week 7 Feb 24	Correlation Coefficient and Charts in Excel (we will pick up learning to graph SSD data here)	Handouts provided	
	Concept of Significance Introduced	Handouts provided	Assignment Homework #5 Due no later @ 11:59 p.m. 3/2

With successful engagement of week 6 content and completion of homework students will be able to:

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- Explain what correlations are and how they work
- Compute a simple correlation coefficient using CORREL function and Correlation tool in Analysis ToolPak
- Use the CORREL function to compute a correlation
- Interpret the value of the correlation coefficient
- Describe what other types of correlations exist and when to use them
- Understand why a picture is worth a thousand words
- Use the Analysis ToolPak to create a histogram
- Use Excel to create and modify charts
- Explain the concept of significance and why it is important
- Describe the importance of and difference between Type I and Type II errors
- Discuss how inferential statistics work

Week 8			
Mar 3	Concept of Significance Continued	Handouts provided	Assignment Homework #6 Due no later than 11: 59 p.m. on 3/9

With successful completion of Week 8 content and homework students will be able to:

- Identify when the t test for independent means is appropriate to use

- Demonstrate how to compute the observed t value
- Demonstrate how to use the TTEST function in excel
- Demonstrate how to use the t – Test Analysis ToolPak tool for computing the t value
- Interpret the t value and understanding what it means

WEEK 9, March 10: Spring Break

With successful engagement of week 7 content and completion of homework students will be:

Relaxed, Focused and Refreshed!



<p>Week 10 Mar 17</p>	<p>Hypothesis Testing: Independent Samples T- Test</p>	<p>Handouts provided</p>	<p>Assignment Homework #7 Due no later than 11: 59 p.m. on 3/23</p>
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With successful completion of this week 10 content and homework, students will be able to:

Week 11 Mar 24	Hypothesis Testing: Dependent Samples T- Test	Handouts provided	Assignment Homework #8 Due no later than 11:59 p.m. on 3/30
With successful completion of week 11 content and homework, students will be able to:			
Week 12 Mar 31	Hypothesis Testing ANOVA	Handouts provided	Assignment Homework #9 Due no later than 11: 59 p.m. on 4/6
With successful completion of week 12 content and homework, students will be able to:			
Week 13 Apr 7	Hypothesis Testing Chi-Square		Assignment Homework #10 Due no later than 11:59 p.m. 4/13
Week 14 & 15 Apr 14 & 21	Review		
Week 16 & 17 Apr 28	Final Exam due by 11:59 p.m. on 5/4		

