

SOCI 3280: Quantitative Data Analysis – Fall 2022

Course Instructor and Contact Information

Instructor: Dr. Cynthia M. Cready, Associate Professor

Instructor's Campus Office Location: 288F Sycamore Hall, Department of Sociology, College of Liberal Arts and Social Sciences, University of North Texas (UNT), Denton

Instructor's Office Hours: Tuesdays 2:00PM-3:00PM or by appointment.

Instructor's Email: Use the Inbox button in Canvas to email me. When you send your message, it will go to the my UNT email address. The Inbox button (represented by the "box with sheet of paper sticking up out of it" icon) is located on the left side of your computer screen after logon to Canvas. I will make every effort to respond to your message within 24 hours.

Class Meeting Venue and Schedule

Course Delivery: In-person

Classroom/Lab: 141 Gateway, UNT, Denton. Please note that neither eating nor drinking is permitted in the classroom, as it is a computer lab.

Class Meeting Schedule: Tuesdays and Thursdays, 11:00AM – 12:20PM. See the attached outline for a schedule of topics and due dates.

Course Prerequisite

You must have passed SOCI 3220 Quantitative Data Collection or equivalent with a "C" before enrolling in this course.

Course Description

This course is an introduction to descriptive and inferential statistics used in analyses of data in the social sciences. This course has an applied focus.

After completing the course, you should be able to:

- Choose the appropriate statistics for a given research question;
- Calculate some of these statistics;
- Interpret the statistics calculated by yourself or generated using SPSS (a popular statistical software package);
- Critically read and interpret published data analyses.

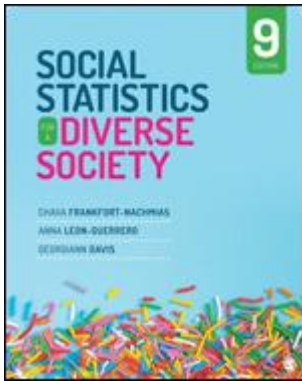
This course fulfills the College of Liberal Arts and Social Sciences requirement for Communication and Digital

Skills. At the end of this course, you should be able to demonstrate effective communication using a digital technological platform and do at least two of the following:

1. Demonstrate the ability to communicate a central idea effectively using appropriate organization/structure.
2. Demonstrate the ability to develop content at an advanced level using a combination of effective supporting material.
3. Demonstrate the ability to engage in verbal and nonverbal communication behaviors that are appropriate for the audience and adhere to the conventions of the medium selected (written, oral, or visual).

Required Materials

Textbook



Frankfort-Nachmias, C., Leon-Guerrero, A., & Davis, G. (2020). Social statistics for a diverse society (9th ed.). Thousand Oaks, CA: Sage. ISBN 978-1-5443-3973-3 [hereafter referenced as SSDS].

Calculator

Bring a simple calculator with a square root key to each class/lab session.

Packages of Colored Candies

For several of the lessons, you will need (unopened) personal-sized packages of colored candies (e.g., M&M's® or Skittles®). These will be distributed to you in class.

Data

For some examples and some of the assignments throughout the semester, we will be using data drawn from various years of the General Social Survey (GSS). Go to the [GSS](#) website for a detailed codebook. Other public-use datasets may also be used. Datasets needed for the lab/homework assignments will be posted to the course website in [Canvas](#). Although we will be performing most of the SPSS® statistical software procedures needed for assignments together in class/lab sessions, you may need access to the software outside of class. If you do not want to buy or rent it, there are two options. Go to a UNT Student Computer Lab (if open, see [Student Computer Labs](#)) or use the newly available desktop streaming service. Click on [Desktop Streaming Service](#) for details regarding this service.

Flash Drive

You may want to bring a USB drive to each class/lab session on which to save any in-class/lab work.

Course Delivery

The course will be delivered in-person.

Course Technology and Skills

Minimum Technology Requirements

- [Canvas Technical Requirements](#)

Computer Skills & Digital Literacy

Course-specific technical skills learners must have to succeed in the course:

- Using Canvas
- Using email with attachments
- Downloading and installing word processing and presentation software (e.g., Microsoft Office 365) (See [Accessing Software Needed for Your Course.](#))
- Accessing statistical software packages (e.g., SPSS® for Windows®) (See [Accessing Software Needed for Your Course.](#))
- Scanning pages of an assignment into a single document pdf file

Technical Assistance

Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: [UIT Student Help Desk website](#)

Email: helpdesk@unt.edu

Phone: (940) 565-2324

In Person: Sage Hall, Room 330

Walk-In Availability: Monday – Friday, 8:00AM – 5:00PM

Telephone Availability:

- Monday – Thursday: 8:00AM – 9:00PM
- Friday: 8:00AM – 5:00PM
- Saturday – Sunday: 11:00AM – 3:00PM

Laptop Checkout: For details, see [Laptop Checkout Program.](#)

For additional support, visit [Canvas Technical Help.](#)

Course Requirements

Class/Lab Attendance and Participation

Because the course material is cumulative, it is essential that you attend all lectures/presentations and computer lab sessions and keep up with the readings and lab/homework assignments.

Reading Assignments

You are responsible for reading the assigned materials before the class meeting indicated on the attached course outline and schedule.

Stats Assessment Pre-Test

The “Stats Assessment Pre-Test” is required for department audit purposes. You will earn 10 points towards your final grade for completing the pre-test.

Intro Post

Since this course will be delivered in person, only one discussion post (plus replies) is required. You can access the discussion by clicking on the dedicated link for it on the “Modules” page of the course website in Canvas, or by clicking on the dedicated link for it on the “Discussions” page of the course website in Canvas. This post (plus replies) is worth 10 points.

Weekly Assignments

There will be 10 “weekly” assignments. Each is worth 10 points for a total of 100 points. The assignments will apply what you learn in class and help to prepare you for the quizzes and exams. You can access the assignments as they are released each week from the “Modules” page in the course website in Canvas. Due dates are listed on the attached weekly class schedule.

Answers to the questions for the weekly assignment should be numbered and typed in complete sentences and saved as a single .pdf file using your last name and the week number (e.g., YourLastNameWeek1). Use the dedicated submission link provided for the assignment on the “Modules” page of the course website in Canvas to submit your answer document as an attachment. You will not be permitted to “make-up” a missed assignment. Every effort will be made to provide feedback on an assignment before the next week’s assignment is due.

Weekly Quizzes

There will also be 10 online quizzes. Each is worth 10 points for a total of 100 points. You can access a quiz by clicking on the dedicated link for it on the “Modules” page in the course website in Canvas. Each quiz will open on Tuesday 11:00AM and close seven days after on the following Tuesday at 11:59PM. You are given three attempts for each quiz. The attempts will not be timed. Only the attempt with the highest score will count towards your course grade. However, please note that each time you take a quiz questions will be randomly drawn from that week’s quiz item pool. Therefore, you may get a slightly different set of questions each time you take it. You will not be permitted to “make-up” a missed quiz.

Research Application

There will be one research application worth 50 points. More information on the research application will be provided in a separate document. This information will be posted to the “Modules” page of the course website in Canvas and discussed in class. In brief, the assignment will guide you in applying a statistical procedure learned in the course to data from one of the course’s (or other approved) datasets.

Answers to the questions for each part/section of the research application should be numbered and typed in complete sentences and saved as a single .pdf file using your last name and the assignment title (e.g., YourLastNameRA1, YourLastNameRA2, etc.). Submit your answer document for each part/section of the research application separately using the dedicated submission link provided for it. You may submit your answers to any part/section of the research application to me for feedback prior to the final submission due date, provided you adhere to the guidelines outlined in the attached “Weekly Class Schedule.” You may use the feedback provided to revise and resubmit your answers by the final submission due date.

Getting Help with an Assignment, Quiz Question, or Research Application

If you need help with an assignment, quiz question, or research application, contact me by using the “Inbox” button in Canvas. When you send your message to me using this function, it will go to my UNT email address. Every effort will be made to respond to your message or email within 24 hours. You may also make an appointment to meet with me.

Do not copy another student’s work or allow another student to copy yours. Both giving/getting unauthorized help and copying another student’s work are violations of UNT’s [Code of Student Conduct](#).

Examinations

There will be three in-class, closed-book exams. Each is worth 100 points for a total of 300 points. Approximately two-thirds of the questions on each exam will come from the weekly quiz question pools. The first exam will be Thursday, September 29, 2022, 11:00AM—12:20PM. The second exam will be Thursday, October, 27, 2022, 11:00AM—12:20PM. The final exam will be Tuesday, December 13, 2022, 10:30AM—12:30PM. Permission to “make-up” a missed exam will only be given for university-approved reasons.

Extra Credit

Opportunities to earn “extra credit” points may be offered at my discretion. Any such opportunity will be offered to all students in the class.

Evaluation

Point values for each of the course requirements and the grading scale for the course are given below.

Point Values for Course Requirements

Requirement	Possible Points
Stats Pre-Test	10
Intro Post (and Replies)	10
Weekly Assignments (10 @ 10 points each)	100

Requirement	Possible Points
Weekly Quizzes (10 @ 10 points each)	100
Examinations (3 @ 100 points)	300
Research Application	50
TOTAL	570

Course Grading Scale

Total Points Earned	Final Course Grade
513 or more	A
456 – 512	B
399 – 455	C
342 – 398	D
341 or fewer	F

UNT Policies

Academic Integrity

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. In this course, a graded assignment compromised by academic dishonesty will earn a zero.

Disability Access

UNT makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information, refer to the [Office of Disability Access](#).

Prohibition of Discrimination, Harassment, and Retaliation

According to UNT Policy 16.004, Prohibition of Discrimination, Harassment, and Retaliation, UNT prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification and Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an

emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the course website on Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT's [Code of Student Conduct](#) to learn more.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail. Click on [Eagle Connect](#).

Policy on Server Unavailability or Other Technical Difficulties

The University of North Texas is committed to providing a reliable online course system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will extend the time windows and provide an appropriate accommodation based on the situation. You should immediately report any problems to the instructor and contact the UNT Student Help Desk: helpdesk@unt.edu or (940) 565-2324. Obtain, record, and retain your incident report number from the UNT Student Help Desk. The instructor and the UNT Student Help Desk will work with you to resolve any issues at the earliest possible time.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Coursework completed via the Canvas on-line system, including grading information and comments, is also stored in a safe electronic environment. You have a right to view your individual record; however, information about your records will not be divulged to other individuals without the proper written consent. You are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See [UNT Policy 04.008, Records Management and Retention](#), for additional information.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination based on sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at (940) 565-2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565-2759.

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the [SPOT website](#) or email spot@unt.edu.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses. See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses](#).

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the [Student and Exchange Visitor Program](#) website. The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f) (6) (G).

The paragraph reads:

“For F–1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer

transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement."

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

1. Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
2. Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the UNT International Student and Scholar Services (ISSS) Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about their need to participate in an on-campus experiential component for this course, they should contact the UNT ISSS Office (internationaladvising@unt.edu) to get clarification before the one-week deadline.

Academic Support & Student Services

Student Support Services

- [Student Health and Wellness Center](#)
- [Counseling and Testing Services](#)
- [UNT Care Team](#)
- [UNT Psychiatric Services](#)
- [Individual Counseling](#)
- [Registrar](#)
- [Financial Aid](#)
- [Student Legal Services](#)
- [Career Center](#)
- [Multicultural Center](#)
- [Pride Alliance](#)
- [UNT Food Pantry presented by Kroger](#)

Academic Support Services

- [Academic Resource Center](#)
- [Academic Success Center](#)
- [UNT Libraries](#)
- [Writing Lab](#)

Note: The following schedule is subject to change. Any changes will be announced in class and posted to the course website in Canvas.

Weekly Class Schedule

Week	Topic	Reading Assignment	Assignment Due
Week 1 Aug. 30 – Sep. 1	Review Syllabus The What & the Why of Statistics	SSDS, Chapter 1 & Appendix F	<u>Due Thursday, 09/01, 11:59PM</u> 1. Stats Assessment Pre-Test 2. Intro Post
Week 2 Sep. 6 – Sep. 8	The Organization & Graphic Presentation of Data	SSDS, Chapter 2	<u>Due Thursday, 09/08, 11:59PM</u> 1. Week 1 Assignment 2. Week 1 Quiz
Week 3 Sep. 13 – Sep. 15	Measures of Central Tendency & Variability	SSDS, Chapters 3 & 4	<u>Due Thursday, 09/15, 11:59PM</u> 1. Week 2 Assignment 2. Week 2 Quiz
Week 4 Sep. 20 – Sep. 22	The Normal Curve & Sampling	SSDS, Chapters 5 & 6	<u>Due Thursday, 09/22, 11:59PM</u> 1. Week 3 Assignment 2. Week 3 Quiz
Week 5 Sep. 27 – Sep. 29	First Exam Review & First Exam	Review SSDS, Chapters 1 – 4	<u>Due Thursday, 09/29, 11:00AM – 12:20PM</u> 1. First Exam
Week 6 Oct. 4 – Oct. 6	Sampling Distribution & Estimating Population Means	SSDS, Chapter 7	<u>Due Thursday, 10/06, 11:59PM</u> 1. Week 4 Assignment 2. Week 4 Quiz
Week 7 Oct. 11 – Oct. 13	Introduction to Hypothesis Testing – The One-Sample t Test	SSDS, Chapter 8	<u>Due Thursday, 10/13, 11:59PM</u> 1. Week 6 Assignment 2. Week 6 Quiz

Week	Topic	Reading Assignment	Assignment Due
Week 8 Oct. 18 – Oct. 20	More Hypothesis Testing – The Two-Sample t Test	SSDS, Chapter 8	<u>Due Thursday, 10/20, 11:59PM</u> 1. Week 7 Assignment 2. Week 7 Quiz
Week 9 Oct. 25 – Oct. 27	Second Exam Review & Second Exam	Review SSDS, Chapters 5 – 8 (One-Sample t Test)	<u>Due Thursday, 10/27, 11:00AM – 12:20PM</u> 1. Second Exam
Week 10 Nov. 1 – Nov. 3	The Bivariate Table & The Chi-Squared Test	SSDS, Chapters 9 & 10	<u>Due Thursday, 11/03, 11:59PM</u> 1. Week 8 Assignment 2. Week 8 Quiz
Week 11 Nov. 8 – Nov. 10	Elaboration Analysis	SSDS, Chapters 9 & 10	<u>Due Thursday, 11/10, 11:59PM</u> 1. Week 10 Assignment 2. Week 10 Quiz
Week 12 Nov. 15 – Nov. 17	Correlation: Scatter Plot & Pearson's r	SSDS, Chapter 12	<u>Due Thursday, 11/17, 11:59PM</u> 1. Week 11 Assignment 2. Week 11 Quiz
Week 13 Nov. 22	Research Application		<u>Due Tuesday, 11/22, 11:59PM</u> 1. Week 12 Assignment 2. Week 12 Quiz
Week 14 Nov. 29 – Dec. 1	Research Application		<u>Due Thursday, 12/01, 11:59PM</u> 1. Research Application (to receive feedback before final submission)
Week 15 Dec. 6 – Dec. 8	Final Exam Review	Review SSDS, Chapters 8 (Two-Sample t Test), 9, 10 & 12	<u>Due Thursday, 12/08, 11:59PM</u> 1. Research Application (final version) 2. Stats Assessment Post-Test
Week 16 Dec. 13	Final Exam		<u>Due Tuesday, 12/13, 10:30AM – 12:30PM</u> 1. Final Exam