

University of North Texas at Dallas
Spring 2016
SYLLABUS

SOCI 3280 001: Quantitative Research Methods		3Hrs
Department of	Sociology	School of
		Liberal Arts and Sciences
Instructor Name:	<i>Dr. Aaron Bartula</i>	
Office Location:	<i>DAL 2 #320</i>	
Office Phone:	<i>972-780-3629</i>	
Email Address:	Aaron.Bartula@untdallas.edu	
Office Hours:	M 8am-10:30m; T 9am-1pm; W 8am-10:30am; TH 9am-12pm	
Virtual Office Hours:	<i>Anytime via email, usually will respond within 24 hours</i>	
Classroom Location:	<i>DAL 2 #307</i>	
Class Meeting Days & Times:	MW 11:30-12:50pm	
Course Catalog Description:	This course prepares students in the application of quantitative research methodology and statistical analysis in sociology and other social science disciplines. Examples using real research data will be provided to facilitate understanding and application of various quantitative and qualitative processes.	
Prerequisites:	SOCI 3220 Qualitative Data Collection	
Co-requisites:	None required, although an understanding of college algebra is essential	
Required Text:	Levin, J., Fox, J.A., & Forde, D.R. (2014). <i>Elementary Statistics in Social Research</i>, 12th edition, Allyn, Bacon, & Longman., Fox, ISBN: 0205845487	
Recommended Text and References:	This is an intensive course. Students in this class are highly encouraged to acquire a calculator with basic algebraic functions.	
Access to Learning Resources:	UNT Dallas Library: phone: (972) 780-3625; web: http://www.unt.edu/unt-dallas/library.htm UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fheg.follett.com	
Course Goals or Overview:		
	The goal of this course is to introduce quantitative analysis techniques and how they are applied in social science research.	
Learning Objectives/Outcomes: At the end of this course, the student will		
1	Be able to explain and differentiate the concepts of sample and population.	
2	Understand and apply concepts of probability.	
3	Formulate hypotheses that require the use of quantitative research methodology.	
4	Identify the appropriate quantitative tools based on the research question.	
5	Demonstrate the ability to apply statistical models to real world research questions.	
6	Demonstrate the ability to compute and interpret statistical data in context.	
7	Demonstrate the ability to connect statistical findings to population and draw inference.	

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by the instructor via Blackboard and email.

TIMELINE	TOPICS	Readings and Problem Sets
1/20/2016	Syllabus	
1/25/2016	Introduction; Choosing the right program for you	Readings: pgs. 1-25 Problems: pgs. 25-29
1/27/2016	Ch. 1: Why We Use Statistics	Readings: pgs. 1-25 Problems: pgs. 25-29
2/1/2016	Ch.2: Organizing the Data	Readings: pgs. 33-72 Problems: pgs. 72-79
2/3/2016	Ch.2: Organizing the Data	Readings: pgs. 33-72 Problems: pgs. 72-79
2/8/2016	Ch.3: Measures of Central Tendency	Readings: pgs. 81-96 Problems: pgs. 96-101
2/10/2016	Ch.3: Measures of Central Tendency; LAB (8-9:30pm)	Readings: pgs. 81-96 Problems: pgs. 96-101
2/15/2016	Ch.4: Measures of Variability; Quiz 1	Readings: pgs. 104-125 Problems: pgs. 125-130
2/17/2016	Ch.4: Measures of Variability	Readings: pgs. 104-125 Problems: pgs. 125-130
2/22/2016	Exam 1	
2/24/2016	Ch.5: Probability and the Normal Curve	Readings: pgs. 135-164 Problems: pgs. 165-171
2/26/2016	Last Day to Drop	
2/29/2016	Ch.5: Probability and the Normal Curve	Readings: pgs. 135-164 Problems: pgs. 165-171
3/2/2016	Ch.6: Samples and Populations	Readings: pgs. 173-209 Problems: pgs. 209-213
3/7/2016	Ch.6: Samples and Populations; Quiz 2	Readings: pgs. 173-209 Problems: pgs. 209-213
3/9/2016	Ch.7: Testing Differences Between Means	Readings: pgs. 217-262 Problems: pgs. 262-274
3/14/2016-3/18/2016	Spring Break NO CLASS!!!	
3/21/2016	Ch.7: Testing Differences Between Means; LAB (8-9:30pm)	Readings: pgs. 217-262 Problems: pgs. 262-274
3/23/2016	Exam 2	Readings: pgs. 276-308 Problems: pgs. 308-316
3/28/2016	Ch.8: Analysis of Variance (ANOVA)	Readings: pgs. 276-308 Problems: pgs. 308-316
3/30/2016	Ch.8: Analysis of Variance (ANOVA)	Readings: pgs. 276-308 Problems: pgs. 308-316
4/4/2016	Ch.9: Non-Parametric Tests	Readings: pgs. 319-349 Problems: pgs. 349-360
4/6/2016	Ch.9: Non-Parametric Tests; Quiz 3	Readings: pgs. 319-349 Problems: pgs. 349-360
4/8/2016	Last Day to Drop with a W	
4/11/2016	Ch.10: Correlation	Readings: pgs. 365-389 Problems: pgs. 389-398
4/13/2016	Ch.10: Correlation	Readings: pgs. 365-389 Problems: pgs. 389-398
4/18/2016	Ch.11: Regression Analysis (OLS)	Readings: pgs. 400-434 Problems: pgs. 434-441
4/20/2016	Ch.11: Regression Analysis (OLS)	Readings: pgs. 400-434 Problems: pgs. 434-441

4/25/2016	Logistic Regression Analysis (LOGIT); Quiz 4	Readings: pgs. 400-434 Problems: pgs. 434-441
4/27/2016	Ch.12: Nonparametric Measures of Correlation	Readings: pgs. 444-464 Problems: pgs. 464-473
5/2/2016	Ch.12: Nonparametric Measures of Correlation; LAB (8-9:30pm)	Readings: pgs. 444-464 Problems: pgs. 464-473
5/4/2016	EXAM 3	5/8/2014

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – *written tests administered via Blackboard designed to measure knowledge and application of presented course module material.*

Pre-quiz - *written quizzes administered via Blackboard designed to measure knowledge and application of the week's presented material and to adequately prepare the student for the end of chapter quiz.*

End of Chapter Quizzes – *written quizzes administered via Blackboard designed to measure knowledge and application of the week's presented material.*

Class Discussions – *weekly participation in class discussion forums.*

Grading Matrix:

Instrument	Value (points)	Total
Exams	3 exams at 100 points each	300
Problem Sets	10 assignments at 10 points each	100
Quizzes	4 quizzes at 25 points each	100
Lab Activities	3 at 50 points each	150
Writing Assignment	100	100
Total:		750

Grade Determination:

A = 750 – 675 pts; i.e. 90% or better

B = 674 – 600 pts; i.e. 80 – 89 %

C = 599 – 525 pts; i.e. 70 – 79 %

D = 524 – 450 pts; i.e. 60 – 69 %

F = 449 pts or below; i.e. less than 60%

No discussion about grades/points will be done through the internet or with anyone other than the student (FERPA law). Please make an appointment and I will happily discuss them or other concerns.

University Policies and Procedures

Students with Disabilities (ADA Compliance):

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit the Student Life Office, Suite 200, Building 2 or email or call Cindy Suarez at Cynthia.suarez@untDallas.edu or 972-338-1777.

Student Evaluation Policy:

The student Course Evaluation is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the Course Evaluations to be an important part of your participation in this class.

Assignment Policy:

Assignment Policy:

Exams - Three exams will be given over the course of the semester. Each exam will consist of a combination of multiple choice, short answer and calculation questions.

Problem Sets – Weekly problem sets will be assigned. Problem sets will consist of multiple choice, short answer and calculation questions.

Exams – Four total quizzes will be given over the course of the semester. Each quiz will consist of a combination of multiple choice, short answer and calculation questions.

Lab Activities- Three lab days are identified in the syllabus. Each lab day will include an in class activity that requires students to submit at the end of the lab session.

Writing Assignment – A writing assignment is required in this course. Each student must take a dataset that will be provided/discussed in class and write a brief 2 page summary of the findings and potential policy implications of said findings. The assignment must be TYPED with **12 point Times New Roman font, 1 inch margins, and Double Spaced.** The paper must include the following information:

- 1) A copy of the dataset/results.
- 2) Your name
- 3) Discuss the chosen variable(s) in detail.
- 4) Discuss trends in the data.
- 5) Present the findings objectively.
- 6) Identify potential policy implications.

Exam Policy:

Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook). It is your responsibility to contact me during the first two weeks of class if there's anything about which I should know concerning special accommodation for any of the assignments. I will try to work out a suitable arrangement, but I must know about it during the first two weeks of class. It is also your responsibility to bring me the required documentation(s) or have the responsible parties contact me in a timely manner for any kind of special accommodation for any of the assignments.

Academic Integrity:

Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity at http://www.unt.edu/unt-dallas/policies/Chapter%2007%20Student%20Affairs,%20Education,%20and%20Funding/7.002%20Code%20of%20Academic_Integrity.pdf for complete provisions of this code.

Bad Weather Policy:

On those days that present severe weather and driving conditions, a decision may be made to close the campus. In case of inclement weather, call UNT Dallas Campuses main voicemail number (972) 780-3600 or search postings on the campus website www.unt-dallas.edu. Students are encouraged to update their Eagle Alert contact information, so they will receive this information automatically.

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information not in the textbook will be discussed in class. Further, in order to receive credit for class discussion the student must be present in class. The dynamic and intensive nature of this course makes it impossible for students to make-up or to receive credit for missed classes. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. It is the student's responsibility to notify the instructor if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Diversity/Tolerance Policy:

Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses, will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Office of Student Life as the instructor deems appropriate. This course is designed to be a safe open forum so that we may critically analyze and discuss content. Thus, please adhere to the guidelines outlined in the Code of Student Conduct.

Optional Policies:

- Use of WebCT/Blackboard: All material will be primarily distributed in class. However, the use of the Blackboard site associated with this course may be utilized if necessary.
- Use of Cell Phones, Laptops, & other Electronic Gadgets in the Classroom: Please turn all cell phones off/on silent before each class starts. If you need to take an emergency call please excuse yourself from the classroom. Students may use laptops to take notes during class. If students begin to exploit the use of computers I will not allow them. **If a student wants to use a recording device you must get my approval prior to use.**
- Food & Drink in the Classroom: Food and drinks are allowed during class, but if they become disruptive to the lecture/discussions, they will be disallowed.
- Grade of Incomplete, "I": Though not encouraged, incomplete grades will be granted on a case by case basis. Each student seeking such grade must come speak to me as soon as it is being considered.