ANTHROPOLOGY 5041.810, 820 Quantitative Methods in Anthropology Spring 2020

INSTRUCTOR: Dr. Lisa Henry

OFFICE HOURS: Mondays 11am-2pm CST, Sycamore 121, or by appointment

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COURSE DESCRIPTION AND OBJECTIVES:

This course will cover basic principles and techniques of research design, sampling, and elicitation for collecting and comprehending quantitative behavioral data, particularly in Anthropology. Procedures for data analysis and evaluation will be reviewed, and students will get hands-on experience with SPSS in order to practice organizing, summarizing, and presenting data. The goal is to develop a base of quantitative and statistical literacy for practical application across the social sciences, in the academy, and the world beyond.

REQUIRED BOOK/ ARTICLES/CHAPTERS/SOFTWARE:

Bernard, Russell

2017 Research Methods in Anthropology: Qualitative and Quantitative Approaches. AltaMira Press Publications, 6th edition. Try to get this edition, but you can use an older one.

Pallant, Julie

2010 SPSS: Survival Manual, 4th edition or later. McGraw Hill: Open University Press. This book is out of print. I've scanned in the chapters that we will use in class so you don't need to buy this. You will find the readings under "Supplementary Readings." I use the 4th edition because it's what I have, but there are also 5th and 6th editions that are not very different. If you choose to buy a copy, you can probably get it on Amazon.

SPSS

We are using SPSS in this class because it has long been established as the gold standard in social science quantitative methods and statistics. There are other programs that are becoming popular, such as R; however, we are going to learn the basics of SPSS in this class. This will be an excellent resume item.

Our college (CLASS) has this software available through Desktop Streaming. Here is the link: https://itservices.cas.unt.edu/services/software/articles/available-software-desktop-streaming. Desktop Streaming has been available for about a year. Last semester there were glitches and some classes were suddenly unable to use the service for the remainder of the semester. This might have happened to some of you. CLASS IT has told me that the glitches have been fixed, so hopefully you can all access SPSS through Desktop Streaming without any headaches. If it does glitch, however, you should be prepared to buy it.

IBM SPSS Statistics 26 can be purchased here: https://onthehub.com/spss/. There are different prices for 6- months and 12-months, and it installs on 2 computers...so you could be mobile. It's available for Windows and Mac.

Supplemental Readings: Other weekly readings for this course will be available electronically under the course module "Supplementary Readings."

You will need access to a computer with Microsoft PowerPoint on it. PowerPoint is available to all students via Office365.com.

COURSE REQUIREMENTS

The Week

The course runs on a weekly cycle (Sunday through Saturday), with one lesson for each week. Lessons will always be made available by the Wednesday before (and if I forget to make something "available," someone email me a gentle reminder!). I encourage everyone to read through the entire lesson early in the week because there are some lengthy discussion posts that are due by Wednesdays with responses due by Fridays. When we have video conferences (see below), everybody must read the lesson and the assigned articles by the time we have a synchronous class meeting.

Video Conferences

Our course includes weekly video conferences starting with Week 7. The main purpose of these video conferences is to go over SPSS and discuss the weekly assignment as a class. They will last no longer than 60 minutes. There is a Doodle Poll on the Discussion board to establish the best time.

Weekly Assignments

You will have eleven assignments in this course, which are due Saturday at 11:59 p.m. CST. Assignments will be accepted after this date but will be marked as late. No assignments will be accepted after Wednesday of the following week, unless you've worked something out with me ahead of time. Many assignments (particularly in the second half of the course) will be GROUP assignments, where you'll have to coordinate with someone else in the class. Plan on group work for Week 5 and then Weeks 8 through the end of the course.

Final project: More about this later, but this will be an analysis you perform on a subset of your choosing of the "World Values Survey" (http://www.worldvaluessurvey.org/). You'll have to choose a subset of countries and questions, do the analysis in consultation with me, give an 7-10 minute presentation to the class, and submit a written report of 6-10 pages based on what you find. You'll get a grade on BOTH the oral and written parts.

Everyone will have the same basic dataset to work with. It's a subset of a real, world-wide survey started by some Europeans in the 1980s, called the "World Values Survey," now run through the University of Michigan. Their intent is to use the data to analyze differences that exist in values and beliefs between people around the world, on things like politics, society, gender, religion, ethics, work, the environment, and culture. Even if you're skeptical (as you should be) that a survey question can be standardized to the point where someone in rural Thailand will interpret it the same as someone in urban Stockholm, Lagos, Buenos Aires, etc. (i.e., that your "reliability is high"), it's a REALLY interesting (and very anthropological) idea. And they do have teams that go into each country in order to attempt to develop language/ culture specific versions of every question. It's all real data- I haven't tampered with it at all, except to give you a selected subset of questions and countries that the student version of SPSS can deal with. You can download the whole survey

yourself (with results all the way back to 1981) at the University of Michigan website (http://www.worldvaluessurvey.org/). As you can imagine, it's huge.

So, what I've done, is uploaded both the survey data and the English- language questionnaire for just the most recently available wave ("Wave 6" took place between 2010 - 2014, in 60 places around the world) as a Word doc. to the "Practice Datasets" folder (under Modules). On the cover page of the questionnaire, I've highlighted in yellow all the countries that were part of this wave of interviews.

You should print out the questionnaire and leaf through it. Everyone will need to choose about 50 variables they want to work with and 1-2 countries (no 'extra' points for 2 countries- I just imagine that some people will want to focus in on one country, while others would rather do comparisons between 2- I'm exactly neutral either way).

Your group can choose whatever "angle" of the survey you want to analyze. Read through the questions; there are plenty to choose from-- environmental attitudes, attitudes towards abortion, unionization, differences between men and women, religious types and non, those who are happy and those who are not, those who have certain values for their children, or really whatever).

You'll write up a 6-10 page report based on what you find. I'll put some sample reports from previous years in the "Supplementary Readings" section of the Modules page, so you can get an idea of what you'll create. In addition, everyone will present their findings to the class in PowerPoint presentations. This will happen over 2 weeks, at the end of the class (see the syllabus). More on that later. You'll get a grade on BOTH the oral and written parts.

Your team's written report should include the following sections:

- INTRO (2 paragraphs)- give some background about the issues involved that led to your choosing of the data that you did. This can include some references to literature, but don't overdo it with an extensive literature review. For example, is there some problem within the population that was polled? Then, "set up" the report by telling who designed the survey/ study you're using (use information from the website), for what populations you chose, when, etc. Finally, set up the information that your report will talk about.
- METHODS (1 paragraph)- Research what you can find out about the World Values Study methods (there are several websites you'll find if you Google or go to Wikipedia). Write them as if you were the director of the study.
- RESULTS (3-5 pages). Here's where you insert graphs, tables, some text, etc. Make sure they convey significant information in ways that are simple, concise, professional, and easy to understand! Highlight statistically significant relationships if they exist. You don't have to do multivariate analyses (a late Weekly Lesson), but I fully expect you to do at least bivariate data analysis with significance testing.
- DISCUSSION (1-2 pages). What was relevant about what you found? Can you think of any limitations of the study data? What would a more in-depth, anthropological/ social science follow-up study/ survey involve?

The oral presentations will be PowerPoint presentations of the angle or issue you've chosen. Aim for around 7-10 minutes, and 8-12 slides, as if you were professionally presenting your findings to a corporate boardroom or an academic conference. (Since you all work in teams, make sure to put your name at the bottom of graphical slides that you develop.) Then we'll take 3-4 minutes of questions. We'll do it all in "Zoom."

Student Evaluation:

Class Participation/Discussion	76 points	299+ = A
Assignments	133 points	266-298 = B
Final	125 points	233-265 = C
Total Points	334 points	

Some Guidelines for Online posts:

In case you don't have much experience with asynchronous discussion boards--these tips can help the communication process flow smoothly. The goal of any online discussion in our program is to have a good back-and-forth among class participants. This is a seminar-style class, so much of your learning will come from each other, and what you discover from the lesson and the readings. I will be assessing you for the overall quality of the whole conversation, rather than the magnificence of an individual posting. Try to post a first message(s) before our video conference every week. Check the discussions daily; focus on contributing to just a few threads if your time is limited. Try to limit yourself to one idea per message! Otherwise ideas get lost.

Frequent small posts are better than humongous messages at rare intervals. This will enable more back-and-forth between you and your classmates. If you have a new thought that you want to share, start a new conversational thread by clicking "Create Message" this will promote the topic, and if there's a subject line, fill it! Change the subject line when you are replying to a message but shifting the focus. If other people have already said what you wanted to say about one topic, move on to a different topic. Don't put your thoughts in a Word attachment; write them directly in the message field. Each week, the discussion leader should create a thread called Questions/Clarification in their topic area, where anyone can post.

While online interaction can enhance learning, it has some limitations; non-verbal cues are missing. Make sure to keep a respectful tone in all messages; everyone should feel encouraged to participate. This isn't so much of an issue in this class, but disagreements over points of view often happen in learning, but personal attacks on the motivations and intelligence are never OK. Remember that there are people behind the words that we see and treat others with the respect that you would want for yourself.

Some Guidelines for Group Work:

Many weeks in the class will involve group work with group sizes of either 2 or 3 people. Learning how to work together in groups is a necessity of life, and working with online collaborators around the globe is a skill every anthropologist needs to learn. I'll have a place in the course for everyone to leave their contact information, but the most important things to remember with group work is to establish channels of communication early in the week, establish reasonable individual and group goals along a time frame, and to keep those lines of communication open. I'll give more specifics in class.

Graduate Student Statement on Professionalism and Plagiarism

The Department of Anthropology considers graduate students to be new members of the community of professional anthropologists, who are thus held to the high ethical standards of practicing professionals. They are expected to follow the American Anthropological Association's code of

ethics: "Anthropological researchers bear responsibility for the integrity and reputation of their discipline, of scholarship, and of science. Thus, anthropological researchers are subject to the general moral rules of scientific and scholarly conduct: they should not deceive or knowingly misrepresent (i.e., fabricate evidence, falsify, plagiarize), or attempt to prevent reporting of misconduct, or obstruct the scientific/scholarly research of others" (http://www.aaanet.org/committees/ethics/ethcode.htm). Any work not meeting this standard will be evaluated in a hearing before the student; infractions will merit dismissal from the master's program.

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. The Code of Student Conduct can be found at www.deanofstudents.unt.edu

Sexual Discrimination, Harassment, & Assault

UNT is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these acts of aggression, please know that you are not alone. The federal Title IX law makes it clear that violence and harassment based on sex and gender are Civil Rights offenses. UNT has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

UNT's Dean of Students' website offers a range of on-campus and off-campus resources to help support survivors, depending on their unique needs: https://deanofstudents.unt.edu, or by calling the Dean of Students' office at 940-565-2648. They are here to help.

Helpful Resources

- 1) Veteran Students: For students who are active or retired military, thank you for serving our country! If you are a new or returning student, UNT has a lively Student Veteran organization, and a number of other campus resources available here: http://studentaffairs.unt.edu/student-veteran-services
- 2) UNT Learning Center: The UNT Learning Center is an AMAZING department filled with AMAZING people all here to help you, the student, maximize your potential in college and beyond. Not only do they provide us with our Supplemental Instructors, they also offer *free of charge* a number of services such as tutoring, academic coaching, study and learning workshops, speed reading, campus resources, and a number of other academic success-related topics! Check them out here: https://learningcenter.unt.edu/
- 3) UNT Writing Lab: Another AWESOME resource available to students is the UNT Writing Lab. Need a refresher course in academic writing or some quick links for your next paper: https://writingcenter.unt.edu/resources. On-campus and want to attend a workshop to improve your writing skills? https://writingcenter.unt.edu/workshops. Off-campus and struggling with academic paper writing? Check out their online tutoring link here: https://writingcenter.unt.edu/online-tutoring

- **4) Life happens!** If you are experiencing a personal or family crisis which is affecting your success as a student here at UNT, please check out the resources here at UNT. http://deanofstudents.unt.edu/resources
- 5) Basic Needs You can't learn if you're hungry: Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable me to provide any resources that I may possess. Dean of Students 940-565-2648. You are not alone. We are here to help.

UNT Food Pantry (some of you may live close to campus): Any current UNT student in need can visit the Food Pantry 10am-7pm Monday-Thursday and 10am-5pm on Fridays during the long semesters. Student can get in through the front door of Crumley Hall, or through the back near the docks. Students who visit the food pantry can request to meet with a staff member to discuss any difficulties they may be facing. When appropriate, referral to additional campus and/or community resources will be made. The Dean of Students Office has established protocols that allow for student confidentiality and dignity to be maintained. There is also a pantry located at the Discovery Park in Room A160 next to the College of Engineering-Office of the Dean, which is open Mon-Fri 8am-5pm. There is also a Food Pantry located at UNT's New College at Frisco, which can be accessed by visiting the information desk.

COURSE SCHEDULE AND READING ASSIGNMENTS

Week 1 (January 13-18): Introductions and Background

Week 2 (January 19-25): Thinking Like a Positivist: Basic Principles of Measurement

- 1. Bernard **skim** Chapter 1, read **in detail** Chapter 2.
- 2. Murtonen, M., and R. Lehtinen. (2003). Difficulties Experienced by Education and Sociology Students in Quantitative Methods Courses. Studies in Higher Education 28 (2): 171-185.

Week 3 (Jan 26-Feb 1): Conceptualizing Research; Researching Ethically

- 1. Bernard Chapter 3 ("Preparing for Research")
- 2. Fluehr-Loban, Carolyn (1994). Informed consent in Anthropological Research: We are not exempt. *Human Organization* 53 (1): 1-10.

^{***} Assignment due at the end of Week 2: (see Canvas course)

^{***} Assignment due at the end of Week 3: (see Canvas course).

Week 4 (February 2-8): Research Design I: Evaluations, and Operationalizing Outcome

- 1. Bernard Chapter 4 ("Research Design")
- 2. Barkman, Susan (2002) A Field Guide to Designing Quantitative Instruments to Measure Program Impact. West Lafayette, IN: Purdue University (on Blackboard)
- 3. Berkowitz, Bill, and Jeanette Nagy (2004). Chapter 3, Section 7. Conducting Needs Assessment Surveys. University of Kansas: The Community Tool Box/ Work Group for Community Health and Development. http://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources/conducting-needs-assessment-surveys/main (read main section, checklist, and examples)

Week 5 (February 9-15): Research Design II: Sampling

- 1. Huff, Darrell (1993) (1954). Introduction and Chapter 1, The Sample With the Built-In Bias, *How to Lie With Statistics*, pages 9-28. New York: Norton and Company.
- 2. Bernard Chapter 5 ("Sampling I: the Basics")
- 3. Babbie- The Practice of Social Research Pp. 218-227

Week 6 (February 16-22): Designing Questions and Doing Interviews

- 1. In Bernard Chapter 8, read sections "Interview Control," "Learning to Interview," "Presentation of Self," "Using a Voice Recorder," "Response Effects," and "Accuracy."
- 2. Bernard Chapter 9 (Interviewing II- Questionnaires) (all).
- 3. Fowler, Floyd J. Jr. (1995). Chapter 2: Designing Questions to Gather Factual Data, Pp. 8-45. *In* Improving Survey Questions. Thousand Oaks: Sage Publications.

^{***} Assignment due at the end of Week 4: (see Canvas)

^{***} Assignment due at the end of Week 5: (see Canvas)

^{***} Assignment due at the end of Week 6: (see Canvas)

Week 7 (Feb 23-Feb 29): Introduction to Data Analysis: Creating Datasets, running frequencies

- 1. Read through the World Values Survey (online), and the background for it: http://www.worldvaluessurvey.org
- 2. Dressler, William (2015) Chapters 1-2: Measures of Central Tendency: the Arithmetic Mean, and Measures of Dispersion: the Standard Deviation. Pp. 31-46. Walnut Creek, CA: Left Coast Press.
- 3. Bernard Ch. 20 ("Univariate Analysis"), from the beginning up to "Measures of Dispersion II" (p 516 in the 6th edition) (note: DON'T get caught up in the math or the formulas! It's more important to me that you understand <u>concepts</u>, not their mathematical derivation) (the exception is the "mean." Everyone should be able to know how to calculate an average). Be able to distinguish univariate from bivariate and multivariate analysis, how to construct a list of codes, how to clean data, the difference between string, nominal, and numerical variables, the difference between mode, median, and mean, and the different kinds of graphs.
- 4. Pallant, pp.16-46 (from Chapters 3, 4, and 5)

***2 Part Homework due at the end of Week 7: (see Canvas)

Week 8 (March 1-7). Univariate, Descriptive Data Analysis and Presentation – I (Selecting out groups, creating and computing new variables, running frequencies)

- 1. In Bernard Chapter 20 ("Univariate analysis"), read "The Logic of Hypothesis Testing (pp. 518-521) (and again, concepts, not math).
- 2. Huff, Darrell (1993) (1954). Chapter 5, The Gee-Whiz Graph, Chapter 6, The One-Dimensional Picture, *How to Lie With Statistics*, Pages 62-75, and 102-123. New York: Norton and Company.
- 3. Pallant, Chapter 8, Pp 90-96 only ("Collapsing the Number of Categories")

*** GROUP Homework due at the end of Week 8: See Canvas. Make sure to prepare 6-10 slide PowerPoint presentation in which you graphically and textually illustrate your findings. You can use either PowerPoint or SPSS graphs. At least ½ of your slides should include graphical illustrations.

MARCH 8-14 SPRING BREAK

Week 9 (March 15-21): Bivariate Beginnings: the chi-square.

- 1. Bernard Chapter 21 (in "Bivariate Analysis"), read from "Cross-tabs of Nominal Variables" through the end of "Fisher's Exact Test" (Pp. 536-543 in the 6th edition). (*concepts, not math derivations*)
- 2. Dressler, William Chapter 3: the Logic of Significance Testing: the Chi-Square. *The 5 Things You Need to Know about Statistics: Quantification in Ethnographic Research.* Walnut Creek, CA: Left Coast Press.
- 3. Huff, Darrell (1993) (1954). Chapter 9 How to Statisticulate. *How to Lie With Statistics*, New York: Norton and Company.
- 4. Pallant, Chapter 16 Pp. 217-221

*** Group Homework for the end of Week 9 (see Canvas). Like last week, group presentations using PowerPoint, and the World Values Survey

Week 10 (March 22-28) Bivariate Tests II: T-tests, ANOVA, and more significance.

- 1. Bernard Chapter 21 (in "Bivariate Analysis") read from Intro through the end of "Direction and Shape of Covariation" (Pp. 527-536).
- 2. Huff, Darrell (1993) (1954). Chapter 10 How to Talk Back to a Statistic. *How to Lie With Statistics*, New York: Norton and Company.
- 3. Dressler, Bill Chapter 4: the Logic of Significance Testing: Analysis of Variance. *The 5 Things You Need to Know about Statistics: Quantification in Ethnographic Research.*Walnut Creek, CA: Left Coast Press.
- 4. Pallant, Chapters 17 and 18

*** 2 Part Homework for the end of week 10: (see Canvas).

Part 1: Group Homework

Part 2: Final Project Homework

Week 11 (March 29-April 4): Bivariate Analysis III: One more t-test, and the "Correlation."

- 1. Dressler, William Chapter 5: the Logic of the Correlation Coefficient. *The 5 Things You Need to Know about Statistics: Quantification in Ethnographic Research.* Walnut Creek, CA: Left Coast Press.
- 2. Pallant, Chapter 11 ("Correlation")

***Individual Assignments due at the end of Week 11: (see Canvas)

Week 12 (April 5-11): Multivariate Analysis: the Linear Regression

1. Pallant, Chapter 13 ("Multiple Regression" through page 162.)

***Homework due at the end of Week 12: (see Canvas)

Week 13 (April 12-18): Wrap Up/ Being a Professional/ Debating Methodologies/ Review

2. Dressler, William (2015). Integrating Quantitative Research into Anthropological Research Design. *The 5 Things You Need to Know about Statistics: Quantification in Ethnographic Research.* Walnut Creek, CA: Left Coast Press.

***Homework: There's an "In-class assignment" due at the end of this week, that should take you about 2 hours. Otherwise, nothing other than to work on your projects. Get moving on your project data analysis and write-up! Call or email me if you have any questions or if I can help.

Week 14 & 15 (APR 19-May 2): Class presentations (all written presentations will be due Wed April 29 by 11:59 p.m. CST).

Discussion/Assignment	Due Date	Points
Video conference time Doodle Poll	1-15	
Week 1 Discussion: Human Organization	1-18	5
Week 1 Discussion – Pictures, Bios, and Contact Info	1-15 and 1-17	2
Week 2 Discussion – Types of Errors	1-22 and 1-24	5
Week 2 Discussion – Operationalizing Variables	1-22 and 1-24	5
End of Lesson 2 Assignment	1-25	10
Week 3 Discussion – More operationalizing	1-29 and 1-31	5
Week 3 Discussion – Hypothesis testing	1-29 and 1-31	5
Week 3 Discussion – Human Terrain Teams	1-31	2
End of Lesson 3 Assignment	2-1	10
Week 4 Discussion – Longitudinal Study	2-5 and 2-7	5
Week 4 Discussion – Program Evaluation	2-5 and 2-7	5
End of Lesson 4 Assignment	2-8	10
End of Lesson 5 Group Assignment	2-15	10
Week 6 Discussion – Survey Questions	2-19 and 2-21	5
Week 6 Discussion – Michelle's Survey Questions	2-21	2
End of Lesson 6 Assignment	2-22	10
Week 7 Discussion – Unclean Data	2-28	2
End of Lesson 7 Assignment	2-29	10
End of Lesson 8 Assignment	3-7	10
Week 8 Discussion – Lesson 8 Assignment	Post 3-7, comments by week 9	2
End of Lesson 9 Assignment	3-21	10
Week 9 Discussion – Lesson 9 Assignment	Post 3-21, comments by week 10	2
End of Lesson 10 Assignment – t-test and ANOVAs	3-28	10
End of Lesson 10 Assignment – WVS "Action Plan"	3-28	10
Week 10 Discussion – Lesson 10 Assignment	Post 3-28, comments by week 11	2
End of Lesson 11 Assignment	4-4	10
Lesson 12 – rough drafts	4-11	10
Week 13 Discussion – Being a Professional	4-18	2
Lesson 13 "in class" Assignment	4-17	13
Participation in Video Conferences		20
Final Project Presentation	ТВА	25
Final Project – Paper version	4-29	100

Discussions/Participation		
Assignments		
Final Proiect		