Sociology – Quantitative Methods in Social Science (0825)

Fall Semester 2020
Professor Josh Klugman
E-mail: **klugman@temple.edu**
Cell: 215-219-9107
Zoom: https://temple.zoom.us/j/2152199107

Sections 1-2	Sections 3-4
Class Meeting Time: MWF 12-12:50 Online	**Class Meeting Time: MWF 10-10:50 Online**
Labs:	**Labs:**
T 1-1:50 (section 1)	**T 1-1:50 (section 1)**
Th 1-1:50 (section 2)	**Th 12-12:50 (section 2)**
Lab Instructor: Nicole Cochran	**Lab Instructor: ~~Nicole Cochran~~ Hana Gebremariam**
E-mail: Nicole.cochran@temple.edu	**E-mail: ~~Nicole.cochran@temple.edu~~ hana.gebremariam@temple.edu**
All class and lab sessions meet at https://temple.zoom.us/j/98214394847	

TEMPLE AND COVID-19

Temple University's motto is Perseverance Conquers, and we will meet the challenges of the COVID pandemic with flexibility and resilience. The university has made plans for multiple eventualities. Working together as a community to deliver a meaningful learning experience is a responsibility we all share: we're in this together so we can be together.

Course Description

Anthropological, psychological, political, social, and economic arguments and knowledge frequently depend on the use of numerical data. An anthropologist might examine how population differences in genes explains population differences in health outcomes; a psychologist might hypothesize that I.Q. is attributable to environmental or genetic factors; a politician might claim that hand gun control legislation will reduce crime; a sociologist might assert that social mobility is more limited in the United States than in other countries, and an economist might declare that globalization lowers the incomes of U.S. workers. How can we evaluate these issues and arguments? Using examples from anthropology, psychology, sociology, political science, and economics, students will examine how social science methods and statistics help us understand the social world. The goal is to become critical consumers of quantitative material that appears in scholarship, the media, and everyday life. *This course fulfills the GenEd Quantitative Literacy requirement.*

Learning Goals

* Understand quantitative models that describe real world phenomena and recognize limitations of those models
* Perform simple mathematical computations associated with a quantitative model and make conclusions based on the results
* Recognize, use, and appreciate mathematical thinking for solving problems that are part of everyday life
* Understand the various sources of uncertainty and error in empirical data

* Retrieve, organize, and analyze data associated with a quantitative model
* Communicate logical arguments and their conclusions.

Prerequisites

No prior knowledge of statistics is necessary, but I assume that students have a solid grasp of arithmetic (for example, addition, subtraction, multiplication, division, fractions, decimals, percentages, square roots, and powers). If this does not apply in your situation, you should consider dropping this course or taking advantage of the Student Success Center (https://studentsuccess.temple.edu/) on Temple's main campus.

How This Course Will Be Taught

Until November 20, 2020:
As of now, you should plan to attend two synchronous online sessions—a class session & a lab session.

Section	Class	Lab	Lab Instructor
1	M 12-12:50*	T 1-1:50	Nicole Cochran
2	W 12-12:50	R 1-1:50	Nicole Cochran
3	M 10-10:50*	T 11-11:50	Hana Gebremariam
4	W 10-10:50	R 12-12:50	Hana Gebremariam

* Classes does not meet Monday, September 7th. The M class sessions for that week are moved to F 9/11.

I will also hold class on Fridays 10-10:50 and 12-12:50 as office hours if people want to review material or ask questions.

In-person activities and instruction for the fall 2020 semester will end Nov. 20, at the start of the fall break.
The remaining week of classes, study period and finals will be conducted remotely.
If all goes well, we will continue the schedule as laid out above for the week of November 30th. I will distribute the final exam on Monday December 7th and it will be due Wednesday December 16th at 12:30pm.

Attendance Protocol and Your Health

If you feel unwell, you should not come to campus, and you will not be penalized for your absence. Instructors are required to ensure that attendance is recorded for each in-person or synchronous class session. The primary reason for documentation of attendance is to facilitate contact tracing, so that if a student or instructor with whom you have had close contact tests positive for COVID-19, the university can contact you. Recording of attendance will also provide an opportunity for outreach from student services and/or academic support units to support students should they become ill. Faculty and students agree to act in good faith and work with mutual flexibility. The expectation is that students will be honest in representing class attendance.

Course Materials

- Required: A cheap scientific calculator

Readings will be posted to Blackboard.

Communications Policy

We will not answer questions regarding course content through e-mail. Instead, such questions should be directed at the discussion forum on Canvas. This will ensure students' equal access to information. Only questions specific to you (e.g. asking to arrange a meeting, or about your grades) should be sent through e-mail.

Technology Requirements

This course requires the use of Canvas, including access to materials and assignment submission. Some videos posted via Canvas will require the use of speakers. I will utilize Zoom to deliver synchronous material. In order to participate in synchronous sessions, you should have a computer, headphones, a microphone, and (less importantly) a webcam.

This course requires the use of Microsoft Office (i.e., Word, Excel, PowerPoint). Students can gain access to these materials by visiting the Computer Services Download Site. We will also use Google Sheets to which all students should have access through their Temple account.

Students should check their Temple email daily for course updates.

All students are required to comply with Temple University's Computer and Network Security Policy

Limited resources are available for students who do not have the technology they need for class. Students with educational technology needs, including no computer or camera or insufficient Wifi-access, should submit a request outlining their needs using the Student Emergency Aid Fund form. The University will endeavor to meet needs, such as with a long-term loan of a laptop or Mifi device, a refurbished computer, or subsidized internet access.

Requirements

Lab Exercises

To hone your statistical skills and make you feel more comfortable using statistics, I will assign semi-weekly labs throughout the semester. Each lab is weighted equally (7 percent of your semester grade).

Exams

We will have three exams, listed on the course schedule below. Exams 1 and 2 will be distributed four days in advance; Exam 3 will be distributed a week and a half in advance. Exams will be open-book and open-note; online proctoring services will not be used.

Quizzes

Throughout the semester I will give short quizzes. Your quiz grade will be based on the best 80% of your quizzes.

Discussion Board Assignment

You will post to the discussion board about a statistics in the news and evaluate the statistic and its write-up that will touch on at least two themes we cover in this class (alternatively: you could write two posts that will each just touch on one theme). You will also have to write a response post to a fellow student's original post.

Lateness Policy

You have a bank of three late days which you can use any way you want (e.g. turn in one assignment late three days; or turn in three assignments one day late). The exceptions are: Exam 3, which can only be late by 1 day, and the early (extra credit) 10/9 deadline for the Initial Post for the Discussion Board Assignment. If you plan to take advantage of this please email me and your lab instructor letting us know by the day the assignment is due.

If you use up your bank your score on the assignment will be docked by 10 percentage points for every day it is late. We are of course living in extraordinary times and if you are in a serious emergency that causes lateness that cannot be covered by your bank we can relax this on an individual basis.

Grade Breakdown

Requirement	Percentage	Final Grade Cutoffs			
Lab Assignments	40%	A	94.0-100.0	C	74.0-76.9
Quizzes (best 80%)	12%	A-	90.0-93.9	C-	70.0-73.9
Exam 1	12%	B+	87.0-89.9	D+	67.0-69.9
Exam 2	12%	B	84.0-86.9	D	64.0-66.9
Exam 3	12%	B-	80.0-82.9	D-	60.0-63.9
Discussion Board Assignment	12%	C+	77.0-79.9	F	<60.0

Schedule

(reading schedule is TENTATIVE)

WEEK	TOPIC / NOTES / READINGS
1 (8/24)	**Introduction** **NO LAB MEETINGS** Best, Joel. 2012. "The Importance of Social Statistics", Chapter 1 in *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. Berkeley, CA: University of California Press. www.jstor.org/stable/10.1525/j.ctt1pptpj
2 (8/31)	**Basic Analyses.** **LABS START THIS WEEK** Best, Joel. 2012. "Soft Facts: Sources of Bad Statistics", Chapter 2 in *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. Berkeley, CA: University of California Press. www.jstor.org/stable/10.1525/j.ctt1pptpj
3 (9/8)	**Sampling** **M classes meet F** Best, Joel. 2012. "Apples and Oranges: Inappropriate Comparisons", Chapter 4 in *Damned Lies and Statistics: Untangling Numbers from the Media, Politicians, and Activists*. Berkeley, CA: University of California Press. www.jstor.org/stable/10.1525/j.ctt1pptpj
4 (9/14)	**Concepts & Measurement** Wheelan, Charles. 2013. "The Importance of Data: "Garbage In, Garbage Out". Chapter 7 in *Naked Statistics: Stripping the Dread From the Data*. New York: W.W. Norton & Co. PDF on Canvas. Cassidy, John. 2006. "Relatively Poor: How Poor is Poor?" *New Yorker* April 3. https://www.newyorker.com/magazine/2006/04/03/relatively-deprived
5 (9/21)	**Exam 1** distributed M **Exam 1** due **F 9/25 1:00pm**
6 (9/28)	**Causal Inference** Petit, Becky. 2012. "Illusions of Progress", Chapter 4 in *Invisible Men: Mass Incarceration and the Myth of Black Progress*. New York: Russell Sage Foundation. https://ebookcentral.proquest.com/lib/templeuniv-

	ebooks/detail.action?docID=4417097 For LAB3: Anders, Jake, Silvan Has, John Jerrim, Nikki Shure, and Laura Zieger. 2020. "Is Canada Really an Education Superpower? The Impact of Non-Participation on Results From PISA 2015." *Educational Assessment, Evaluation and Accountability*
7 (10/5)	**Central Tendency / Quantitative Comparisons** **Initial Post for Discussion Board Assignment Early Deadline (F 10/9 1pm)** *(no late days can be used for this extra credit deadline!)* Sanbonmatsu, Lisa, Jeffrey R. Kling, Greg J. Duncan, and Jeanne Brooks-Gunn. 2007. "New Kids on the Block." *Education Next* 7(4): 60-66. https://www.educationnext.org/new-kids-on-the-block/ Rothwell, Jonathan. 2015. "Sociology's Revenge: Moving to Opportunity (MTO) Revisited." Brookings Institute, May 6. https://www.brookings.edu/blog/social-mobility-memos/2015/05/06/sociologys-revenge-moving-to-opportunity-mto-revisited/ Miller, Jane. 2004. "Types of Quantitative Comparisons." Chapter 5 in *The Chicago Guide to Writing About Numbers*. Chicago, IL: University of Chicago Press. PDF on Canvas.
8 (10/12)	**Two-Way Tables** Himmelstein, David U., Deborah Thorne, Elizabeth Warren, and Steffie Woolhandler. 2009. "Medical Bankruptcy in the United States, 2007: Results of a National Study." *American Journal of Medicine* 122(8): 741-746. https://doi-org.libproxy.temple.edu/10.1016/j.amjmed.2009.04.012 Dobkin, Carlos, Amy Finkelstein, Raymond Kluender, and Matthew J. Notowidigdo. 2018. "Myth and Measurement—The Case of Medical Bankruptcies." New England Journal of Medicine 378: 1076-1078. https://doi-org.libproxy.temple.edu/10.1056/NEJMp1716604
9 (10/19)	**Correlation / Regression** Wheelan, Charles. 2013. "Program Evaluation: Will Going to Harvard Change Your Life?" Chapter 13 in *Naked Statistics: Stripping the Dread From the Data*. New York: W.W. Norton & Co. PDF on Canvas
10 (10/26)	**Multivariate Statistics** **Exam 2** distributed M **Exam 2** due **F 10/30 1:00pm**
11 (11/2)	**Probability** Wheelan, Charles. 2013. "Basic Probability: Don't Buy the Extended Warranty on Your $99 Printer." Chapter 5 in *Naked Statistics: Stripping the Dread From the Data*. New York: W.W. Norton & Co. PDF on Canvas
12 (11/9)	**Probability continued** **Initial Post for Discussion Board Assignment Due F 11/13 1:00pm** Wheelan, Charles. 2013. "Problems with Probability: How Overconfident Math Geeks Nearly Destroyed the Global Financial System." Chapter 6 in *Naked Statistics: Stripping the Dread From the Data*. New York: W.W. Norton & Co. PDF on Canvas
13 (11/16)	**Normal distribution** Aschwanden, Christie. 2019. "We're All 'P-Hacking' Now." *Wired* November 26. https://www.wired.com/story/were-all-p-hacking-now/
14 (11/30)	**Confidence Intervals** **Response Post for Discussion Board Assignment Due F 12/4 11:59pm**
15 (12/7)	**Catch-Up** **Final paper due.**

	Exam 3 distributed M 12/7
16 (12/16)	**Exam 3** due 1:00pm
	You can only use one late day from your bank for Exam 3!

Disability Statement

This course is open to all students who meet the academic requirements for participation. Any student who has a need for accommodation based on the impact of a disability should contact the instructor privately to discuss the specific situation as soon as possible. Contact Disability Resources and Services at 215-204-1280 in 100 Ritter Annex to coordinate reasonable accommodations for students with documented disabilities.

Expectations for Class Conduct

In order to maintain a safe and focused learning environment, we must all comply with the four public health pillars: wearing face coverings, maintaining physical distancing, washing our hands and monitoring our health. It is also important to foster a respectful and productive learning environment that includes all students in our diverse community of learners. Our differences, some of which are outlined in the University's nondiscrimination statement, will add richness to this learning experience. Therefore, all opinions and experiences, no matter how different or controversial they may be perceived, must be respected in the tolerant spirit of academic discourse. Treat your classmates and instructor with respect in all communication, class activities, and meetings. You are encouraged to comment, question, or critique an idea but you are not to attack an individual. In general, have your behavior mirror how you would like to be treated by others.

Mandatory Reporting Statement.

Please note that as a faculty member, I am required to report any information regarding sexual misconduct to the University Title IX Coordinator; as a student, however, you are **not** required to meet with or report anything the Title IX office. Students may speak to someone **confidentially** by contacting Student Health Services (215-204-3284) or Women Organized Against Rape (24 hours confidential; 215-985-3333).

Policy on Academic Honesty

The section in italics is quoted verbatim from the Temple University Bulletin for 2020-2021.

Temple University believes strongly in academic honesty and integrity. Essential to intellectual growth and the university's core educational mission is the development of independent thought and a respect for the thoughts of others. Academic honesty fosters this independence and respect. Academic dishonesty undermines the university's mission and purpose and devalues the work of all members of the Temple community. Every member of the university community is responsible for upholding the highest standards of honesty at all times. Students, as members of the community, are responsible for adhering to the principles of academic honesty and integrity.

Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling or distribution of term papers or other academic materials. Normally, all work done for courses — papers, examinations, homework exercises, laboratory reports, oral presentations — is expected to be the individual effort of the student presenting the work. Any assistance must be reported to the instructor. If the work has entailed consulting other resources — journals, books, or other media — these resources must be cited in a manner appropriate to the course. It is the instructor's responsibility to indicate the appropriate manner of citation. Everything used from other sources — suggestions for organization of ideas, ideas themselves, or actual language — must be cited. Failure to cite borrowed material constitutes plagiarism. Undocumented use of materials from the World Wide Web is plagiarism.

Cheating includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) use of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; (3) the acquisition, without permission, of tests or other academic material belonging to a member of the university faculty or staff; (4) engaging in any behavior specifically prohibited by a faculty member in the course syllabus, assignment, or class discussion; (5) or otherwise engaging in behavior that gives the student an unfair academic advantage including, but not limited to, fabrication of data or sources, resubmitting work already submitted for another academic requirement without prior authorization, or other similar behavior.

Refer to the Student Conduct Code (policy # 03.70.12) for more specific definitions of cheating and plagiarism.
The penalty for academic dishonesty can vary from receiving a reprimand and a failing grade for a particular assignment, to a failing grade in the course, to suspension or expulsion from the university. The penalty varies with the nature of the offense, the individual instructor, the department, the school or college, and the Office of Student Conduct and Community Standards.

Students who believe that they have been unfairly accused may appeal through the school or college's academic grievance procedure. For more information see Grievances.

Statement on recording and distribution of recordings of class sessions

My plan is to record all class and lab sessions for educational use by students in the class. To protect the privacy of other students taking the course (who may appear in the recordings), students are not permitted to share the recordings with others not in the class.

Student Support Services

The following academic support services are available to support you:
Student Success Center
University Libraries
Undergraduate Research Support
Career Center
Tuttleman Counseling Services
Disability Resources and Services

If you are experiencing food insecurity or financial struggles, Temple provides resources and support. Notably, the Temple University Cherry Pantry and the Temple University Emergency Student Aid Program are in operation as well as a variety of resources from the Office of Student Affairs.