



Course information

Course website: <http://www.ernestoamaral.com/soci420-18fall.html>

Meeting location: Academic Building 308 (<http://aggiemap.tamu.edu/?bldg=0462>)

Meeting times: Lecture, Monday and Wednesday, 3–3:50pm
Lab, Friday, 3–3:50pm

Instructor information

Ernesto F. L. Amaral, Assistant Professor, Department of Sociology
Office location: Academic Building 415
Office hours: Monday, 1–2:30pm; and by appointment. Appointment requests must be made at least 72 hours in advance.
Phone: (979)845–9706
Email: amaral@tamu.edu

Teaching assistant information

Michael Upchurch, Graduate Student, Department of Sociology
Office location: Academic Building 414A
Office hours: Wednesday, 9–10am; Thursday, 11:30am–12:30pm; and by appointment on Monday and Tuesday. Appointment requests must be made at least 72 hours in advance.
Email: michaelj.church@tamu.edu

Course description

Main contents: This course on advanced methods of social research will cover major topics related to (1) descriptive statistics; (2) inferential statistics; (3) bivariate measures of association; and (4) multivariate techniques. Specific subjects are listed in the calendar of activities provided in this syllabus.

Prerequisite: Sociology majors should have taken and completed Methods of Social Research (SOCI 220) prior to taking SOCI 420. This prior course covers topics related to relationships between sociological theories, research, qualitative evaluation of data, construction and use of analytical procedures and research techniques, and participant observation.

Writing intensive: This course is a writing intensive course with lectures and assignments focusing on appropriate techniques for presenting data and results of statistical analysis, interpreting results, and integrating analysis and interpretation into technically rigorous reports. The course will count toward your university-mandated writing course degree requirement.

Computer intensive: Topics learned in this course will be exemplified with databases, Microsoft Excel, and the statistical software Stata.

Material: Via the course website, I will provide files containing the syllabus, slides, assignments, databases, Stata codes, external links, and other materials, which will be uploaded throughout the semester.

Approach: I encourage students to apply the knowledge they acquire to analyze aggregated data and survey microdata. I emphasize the interpretation of results obtained using statistical techniques, as opposed to asking my students to memorize or manually calculate multiple statistics. My teaching strategy is to break down the significance of statistical methods and make the topic accessible through the use of diagrams, software, household survey databases, handouts, and interactive lab classes.

Learning outcomes

Upon successfully completing this course, students should be able to:

- Identify advanced concepts related to social research methods.
- Apply quantitative techniques to manipulate sociological databases and analyze the results.
- Investigate social issues using research methods, databases, and statistical software.
- Explain limitations of social research using quantitative methods.
- Analyze microdata from social surveys with statistical software.
- Generate, present, and interpret analyses of sociological data with tables and graphs.
- Elaborate reports based on surveys, utilizing statistical methods, and sociological hypotheses.

Textbook and resource material

There are several options to buy or rent (new, used or digital) copies of the books listed below. As a student at Texas A&M you are not under any obligation to purchase a textbook from a university affiliated bookstore. The same textbook may also be available from independent retailers, including online retailers.

The following textbooks are **recommended** for this course:

1. Healey, Joseph F. 2015. **Statistics: A Tool for Social Research**. Stamford: Cengage Learning. 10th edition. (H)
[\(MSC Bookstore\)](#)
[\(Amazon\)](#)

This material is essentially the same as the 9th edition. Since the cost of these editions recently became quite similar, I will formally utilize the 10th edition for my lectures. However, if you find a retailer selling the 9th edition with a more affordable price, you can acquire that edition for this course.

2. Illowsky, Barbara; Dean, Susan. 2018. **Introductory Statistics**. Houston: OpenStax. (I)
<https://openstax.org/details/books/introductory-statistics>

This is an open access textbook, so it is free for downloading.

3. Miller, Jane E. 2015. **The Chicago Guide to Writing About Numbers**. Chicago: The University of Chicago Press. 2nd edition. (M)
[\(MSC Bookstore\)](#)
[\(Amazon\)](#)

This manual for writing about numbers is not required, but I will use it during my lectures to give examples of how to organize, present, and interpret numbers. There are also several online resources to learn about this topic in the Sociology field, such as:

- Formatting in Sociology (American Sociological Association – ASA Style)
<https://owl.english.purdue.edu/owl/resource/583/1/>
- Writing with Statistics
<https://owl.english.purdue.edu/owl/resource/672/1/>

We will use **Excel and the statistical software Stata** for applications with real databases. Stata will be made available in class. We will have several in-class activities in order to learn Stata. I invite you to bring your own laptop to class if you have one available that can run this software. The Department of Sociology has a few loaner laptops that can be used during class time on a first-come first-serve basis.

Grading policies and scale

Grading scale: The course follows the standard rules of the university regarding the letter grading scale (<http://student-rules.tamu.edu/rule10>). **Sociology majors must pass with a C to graduate.**

Assessment	Percent of final grade	Details	Grading scale	Percent
Assignment 1	20.0%		A	90–100%
Assignment 2	20.0%		B	80–89%
Assignment 3	20.0%		C	70–79%
Final exam	25.5%	85 questions, 0.3 points per question	D	60–69%
Attendance	12.3%	41 classes, 0.3 points per class	F	0–59%
Teaching evaluation	2.2%	1 class		
Total	100.0%			
Bonus	8.7%	29 lectures, 0.3 points per lecture		

Assignments will explore empirical exercises using real databases with Excel and the statistical software Stata. Students will have to present data of statistical analysis and interpret results in technically rigorous reports. Details about each assessment will be provided on the course website.

Communication: I will utilize eCampus (<http://ecampus.tamu.edu/>) to communicate with students, receive assignments, and provide other resources.

Submission: Assignments will be submitted through Turnitin within eCampus. “Turnitin is an online database system designed to help instructors **detect plagiarism**, track citations, facilitate peer reviews, and provide paperless grading markup in written assignments” (<http://its.tamu.edu/Systems-Software/TurnItIn>).

Due dates: Students will have until 11:59pm of the due dates to turn in assignments through eCampus. Due dates are listed in the calendar of activities of this syllabus.

Late submission: Students who submit their assignments after the due date will have a 10 percent reduction in their grade for each day of late submission. Late submissions will only be accepted before the grades for a specific assignment are posted on eCampus.

Resubmission: Students will have the opportunity to submit, receive feedback, revise, and resubmit assignments throughout the semester. Students should resubmit their assignments no later than one week after the grades for a specific assignment are posted on eCampus. The time for resubmission may be shorter for some assignments.

Assignments will not be graded on a curve.

Study groups: You are not competing with others in this class for a grade. Feel free to form study groups to review course materials and work on example problems. However, assignments are not group projects. All assignments should reflect only your own work. Students should not prepare or compare their answers to assignments with the work of others before submitting for a grade.

Final exam will be given in class and will consist of calculations, multiple choice questions, short answer questions, and essay questions. The date and time are available in the calendar of activities of this syllabus. The exam will be given during final examinations week in accordance with the schedule published by the Office of the Registrar (<http://registrar.tamu.edu/Courses,-Registration,-Scheduling/Final-Examination-Schedules>). See more information about Student Rules regarding examinations via the following link (<http://student-rules.tamu.edu/rule08>).

Attendance: Students will receive 0.3 points per class attended, which includes the **first 41 classes** throughout the semester (28 lectures and 13 lab sessions).

Teaching evaluation: In the **last lecture** of the semester (#42), the professor will give the teaching evaluation form for students to complete. Students who sign the attendance sheet this day will receive 2.2 points in their final grade.

Bonus: During the **29 lectures** throughout the semester, students will obtain 0.3 bonus points per class if they ask a question or answer a question posed by the professor during the lecture.

Attendance policy

This course is organized on the assumption that students will attend and participate in every class. The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. **I will take attendance each class.** University rules related to excused and unexcused absences are located online at <http://student-rules.tamu.edu/rule07>.

Dates on which the final exam and major assignments will be due are provided in the calendar of this syllabus. Topics and dates of lectures, assignments, and final exam are subject to change. Eventual changes will be clarified during classes and will be posted on the course website. Students who miss class are responsible for searching for information on: changes to the class schedule announced during the lecture periods, changes in assignment requirements or exam coverage announced during the lecture periods, any materials distributed during the lecture periods, and all materials presented in the lectures. The course website, fellow students in the class, and the teaching assistant are resources to help you stay current on the schedule and any course changes.

Students will need to sign an attendance sheet each day with a blue or black ink pen, in order for attendance to be considered valid. It is your responsibility to make sure you sign the attendance sheet if you are in class that day.

I will not provide the number of unexcused absences each student has throughout the semester. You are responsible for keeping your own records of absences for this course. On eCampus I will provide the final number of unexcused absences on December 3, 2018 (Monday) after lecture #41. If this information does not correspond to your records, you should make an appointment to come to my office that same week with documentation related to these absences (see details about absence policy below).

Make-up policy

If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend, unless they have a university-approved excuse. **The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence.**

Absence policy

The student is responsible for providing satisfactory evidence to the instructor to substantiate the reason for the absence. The specifics of what constitutes an excused absence are available at <http://student-rules.tamu.edu/rule07>. The fact that these are university-excused absences does not relieve the student from responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code. **Documentation has to be provided in print to the professor during regular class hours, not by email.**

Other absences not listed in the link above may be excused at the discretion of the instructor with prior notification and proper documentation. In cases where prior notification is not feasible (e.g., accident or emergency) the **student must provide notification by the end of the second working day after the absence,** including an explanation of why notice could not be sent prior to the class. Accommodations sought for absences due to the observance of a religious holiday can be sought either prior to or after the absence, but not later than two working days after the absence.

Electronic devices and eating in class

During classes, laptops, tablets, and smartphones should not be used for activities that are not directly related to the course.

Examples of **activities unrelated to class** include: checking and answering email, texting, scheduling appointments, viewing videos, and viewing websites with materials unrelated to the course.

Examples of **activities related to class** include: reviewing documents and course materials posted on the web, and examining websites that are visited as part of the lecture. If the policy is not respected, I will ban all devices for non-laptop required sessions.

Eating is not permitted during classes.

University Writing Center (UWC)

The mission of the University Writing Center (UWC) is to help you develop and refine the communication skills vital to success in college and beyond. You can choose to work with a trained UWC peer consultant in person or via web conference or email. Consultants can help with everything from lab reports to application essays and at any stage of your process, from brainstorming to reviewing the final draft. You can also get help with public speaking, presentations, and group projects. The UWC's main location is on the second floor of Evans Library; there's also a walk-in location on the second floor of West Campus Library. To schedule an appointment or view our helpful handouts and videos, visit <http://writingcenter.tamu.edu>. Or call (979)458-1455.

Americans with Disabilities Act (ADA) policy 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 believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>.

Office hours

Office hours are intended to assist students who are seeking help understanding course materials (lectures, readings, lab classes, etc.) and to mentor students. Office hours do not substitute for attendance in class. I will not discuss missed classes unless the student missed those classes because of an authorized excuse. University rules related to excused and unexcused absences are located online at <http://student-rules.tamu.edu/rule07>. As Student Rules state: (1) it is the student's responsibility to attend class; and (2) if I used office hours to substitute for attendance in class, it would be a disservice to students who wish to use office hours to enhance their academic success.

Academic integrity statement and policy

"An Aggie does not lie, cheat, or steal, or tolerate those who do" (<http://aggiehonor.tamu.edu>).

Definitions of academic misconduct are available in this link (<http://aggiehonor.tamu.edu/Rules-and-Procedures/Rules/Honor-System-Rules#Definitions>). "According to the Aggie Honor System Office, Plagiarism is 'The appropriation of another person's ideas, processes, results, or words without giving appropriate credit.' Plagiarism is just one form of academic misconduct; plagiarism and cheating are perhaps the most commonly practiced" (http://library.tamu.edu/services/library_tutorials/academic_integrity/index.html).

Title IX and statement on limits to confidentiality

Texas A&M University and the College of Liberal Arts are committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws provide guidance for achieving such an environment. Although class materials are generally considered confidential pursuant to student record policies and laws, University employees — including instructors — cannot maintain confidentiality when it conflicts with their responsibility to report certain issues that jeopardize the health and safety of our community. As the instructor, I must report (per Texas A&M System Regulation 08.01.01) the following information to other University offices if you share it with me, even if you do not want the disclosed information to be shared:

- Allegations of sexual assault, sexual discrimination, or sexual harassment when they involve TAMU students, faculty, or staff, or third parties visiting campus.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In many cases, it will be your decision whether or not you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the Student Counseling Service (<https://scs.tamu.edu/>).

Students and faculty can report non-emergency behavior that causes them to be concerned at <http://tellsomebody.tamu.edu>.

If you have been sexually assaulted, you have options for help. Reporting resources will report your assault to the university, non-reporting resources will keep it confidential.

– Reporting Resources

STUDENT ASSISTANCE SERVICES

Student Services @ White Creek
Student Life 3 (Bldg. #72), Room 101
College Station, TX 77843-1257
Phone: (979)845-3111

TAMU POLICE DEPARTMENT

1111 Research Pkwy
College Station, TX 77845
(979)845-2345

*ANY TAMU EMPLOYEE (EXCEPT COUNSELING & BUETEL) ARE MANDATORY REPORTERS.

– Non-reporting Resources

SEXUAL ASSAULT RESOURCE CENTER (SARC)

Free 24/7 Crisis Hotline, Counseling, accompaniments to hospital.
24/7 Crisis Hotline: (979)731-1000
<http://www.sarcbv.org>

TAMU COUNSELING SERVICES

757 West Campus Blvd.
College Station, TX 77843-1263
Phone: (979)845-4427

BAYLOR SCOTT & WHITE

(24/7 Sexual Assault exams)
700 Scott and White Dr.
College Station, TX 77845
(979)207-0100

Calendar of activities, course topics, and major assignment dates (tentative)

The tentative calendar of activities below includes dates, course topics, readings, and major assignment dates for this course. Changes will be indicated during classes and will be posted on the course website.

Lecture & Lab	Date	Topic	Reading Author.chapter	Assignments due dates & exam dates
AUGUST				
01	08/27 (Monday)	Syllabus & Introduction	Syllabus, H.1, I.1	
02	08/29 (Wednesday)	Introduction	H.1, I.1	
03	08/31 (Friday)	Statistical software	Stata01.txt	
SEPTEMBER				
04	09/03 (Monday)	Basic descriptive statistics	H.2, I.2	
05	09/05 (Wednesday)	Basic descriptive statistics & Sample weights	H.2, I.2, Slides	
06	09/07 (Friday)	Statistical software	Stata02.txt	
07	09/10 (Monday)	Measures of central tendency	H.3, I.2	
08	09/12 (Wednesday)	Measures of central tendency	H.3, I.2	
09	09/14 (Friday)	Statistical software	Stata03.txt	
10	09/17 (Monday)	Measures of dispersion	H.4, I.2	
11	09/19 (Wednesday)	Measures of dispersion	H.4, I.2	
12	09/21 (Friday)	Statistical software	Stata04.txt	
13	09/24 (Monday)	The normal curve	H.5, I.6	
14	09/26 (Wednesday)	The normal curve	H.5, I.6	
15	09/28 (Friday)	Statistical software	Stata05.txt	Assignment 1 (chapters 2–4)
OCTOBER				
16	10/01 (Monday)	Introduction to inferential statistics	H.6, I.7	
17	10/03 (Wednesday)	Introduction to inferential statistics	H.6, I.7	
18	10/05 (Friday)	Statistical software	Stata_append.txt	
19	10/08 (Monday)	Estimation procedures	H.7, I.8	
20	10/10 (Wednesday)	Estimation procedures	H.7, I.8	
21	10/12 (Friday)	Statistical software	Stata06-07.txt	

Lecture & Lab	Date	Topic	Reading Author.chapter	Assignments due dates & exam dates
OCTOBER				
22	10/15 (Monday)	Hypothesis testing I: The one-sample case	H.8, I.9	
23	10/17 (Wednesday)	Hypothesis testing I: The one-sample case	H.8, I.9	
24	10/19 (Friday)	Statistical software	Stata08.txt	
25	10/22 (Monday)	Hypothesis testing II: The two-sample case	H.9, I.10	
26	10/24 (Wednesday)	Hypothesis testing II: The two-sample case	H.9, I.10	
27	10/26 (Friday)	Statistical software	Stata09.txt	
28	10/29 (Monday)	Hypothesis testing III: The analysis of variance	H.10, I.13	
29	10/31 (Wednesday)	Hypothesis testing IV: Chi square	H.11, I.11	
NOVEMBER				
30	11/02 (Friday)	Statistical software	Stata10.txt & Stata11.txt	
31	11/05 (Monday)	Bivariate association for nominal- and ordinal- level variables	H.12	
32	11/07 (Wednesday)	Bivariate association for nominal- and ordinal- level variables	H.12	
33	11/09 (Friday)	Statistical software	Stata12.txt	Assignment 2 (chapters 5–11)
34	11/12 (Monday)	Association between variables measured at the interval-ratio level	H.13, I.12	
35	11/14 (Wednesday)	Association between variables measured at the interval-ratio level	H.13, I.12	
36	11/16 (Friday)	Statistical software	Stata13.txt	
37	11/19 (Monday)	Partial correlation, multiple regression, and correlation	H.15, I.12	
—	11/24 (Wednesday)	Reading day, no classes	—	
—	11/23 (Friday)	Thanksgiving Holiday	—	
38	11/26 (Monday)	Partial correlation, multiple regression, and correlation	H.15, I.12	
39	11/28 (Wednesday)	Partial correlation, multiple regression, and correlation	H.15, I.12	
40	11/30 (Friday)	Statistical software	Stata15.txt	
DECEMBER				
41	12/03 (Monday)	Overall review	—	
42	12/05 (Wednesday)	Overall review & Teaching evaluation	—	Assignment 3 (chapters 12–15)
43	12/11 (Tuesday)	Final exam , 10:30am–12:30pm	Material from lectures 1–42	Final exam