

Fall 2023

“Sociological Data Analysis”♦

SYA 4930

MWF Period 8 (3:00 – 3:50PM) | TURLINGTON 2342

Professor:

Dr. Autumn McClellan
pronouns: she/they

Office Hours:

MWF 4:00PM – 5:00PM
& BY APPOINTMENT
Turlington 3361B

Course Goals:

“Nine out of 10 dentists recommend Sensodyne for sensitive teeth.”

“Students passing AP exams are three times more likely to earn a college degree than students who do not pass.”

“Serta mattresses provide up to 33% more pressure relief than other brands.”

From news reports to the latest Nike shoe design, statistical claims have become an element of everyday life. But how often do you stop and wonder, “How did they calculate that statistic?” or “Did they consider the differences between men and women?” You probably don’t much think about these matters, either because of a lack of statistical knowledge or lack of interest. My hope is that neither of those barriers will be an issue after you finish this course!

There are three main goals for this course:

- 1) To learn how to think like a researcher, or develop a ‘statistically-minded sociological imagination’
- 2) To learn the mathematic basis of statistics
- 3) To learn some basic skills in STATA, a statistical analysis software program

Textbook:

The textbook is required for all students. You may buy it at the Student Stores bookstore or elsewhere. I expect you to have and read the book, so I chose a book with well-written information that was inexpensive.

Miethe, Terance and Jane Gauthier. *Simple Statistics: Applications in Social Research*. New York: Oxford University Press, 2008. ISBN: 9780195332544

Class Format:

This is fully face-to-face course; students will NOT be able to attend class remotely.

♦ This syllabus represents an approximation of the course’s content and schedule. The instructor reserves the right to make reasonable changes and alterations of the schedule and content of this syllabus and to announce those changes in class. Students are responsible for fulfilling any new or revised requirements or obligations resulting from these changes.

Schedule:

Dates, topics, required readings, and assignments can be found in the “Course Schedule” on Canvas.

Attendance:

You are required to attend every scheduled class session and will receive a grade based on your attendance record. You should NOT schedule appointments, meetings, trips, or other activities that would require you to miss some or all of class. Students who arrive late or leave early may lose points at the Professor’s discretion.

Any student who fails to attend at least one of the first two class meetings and has not contacted the Professor will be dropped from the course. I will do my best to ensure that these students are disenrolled before the end of the drop/add period so that they can find another class (if desired), but they will not be allowed to re-enroll in this section of the course.

Students who have court-imposed legal obligations (e.g., jury duty or subpoena) or accommodations through the Disability Resource Center (DRC) must contact the Professor as soon as possible to discuss how these circumstances will affect their ability to attend class and complete assignments, and the Professor will work with students to establish the appropriate accommodations. Students must provide supporting evidence or documentation with their request (e.g., court paperwork or DRC Accommodation Letter). More information about DRC accommodations can be found in the “Accessibility Accommodations” section at the end of this syllabus. All other requests for excused absences are granted at the Professor’s discretion.

Students may request an excused absence due to religious holidays, military obligations, professional development activities, or participation in university-sponsored activities, but these requests must be made at least 2 business days before the relevant class period(s) and should be accompanied with some kind of supporting evidence or documentation. Requests for excused absences are granted at the Professor’s discretion.

If you believe you will be unable to attend class due to some kind of exceptional circumstance, please contact the Professor before the relevant class period(s) to explain the circumstances, if possible. Exceptional circumstances are limited to any emergency which can be clearly documented, including, but not limited to: a death in the family, medical emergency/illness requiring medical attention for the student or family member, or related urgent issues beyond the student’s control. In some cases, students may be asked to send supporting evidence or documentation directly to the Professor. For other circumstances, the Professor will ask students to follow the procedures for the Dean of Students Office Instructor Notification form (<https://care.dso.ufl.edu/instructor-notifications/>), which also includes submitting supporting evidence or documentation for your circumstances. Students who miss class without prior notification or due to medical issues must submit an Instructor Notification request to the Dean of Students. The Dean of Students Office will review your documentation and make a recommendation as to whether your circumstances should warrant an excused absence. However, the Professor reserves the right to accept or reject the Dean of Students recommendation.

The complete University policies regarding absences and make-up work can be found online (<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext>).

Classroom Conduct:

You are expected to come to class focused and prepared and to remain attentive and respectful during class time. Class time is very valuable, so we must make every effort not to waste it. I ask that you arrive before class is scheduled to start so that we make begin on time, and you may not pack your belongings before you are dismissed. I will make every effort to end class and dismiss you on-time, but if I begin to run over, you may raise your hand and remind me of the time.

Students may use their computers or cell phones to access online materials, but should refrain from engaging in non-course related activities during class time (such as contacting friends or buying things on Amazon). This kind of behavior is distracting to other students and the Professor.

Ultimately, I ask that you be respectful of all students and myself. I believe we are all trying to make the best of these unprecedented circumstances, and we should all approach this semester with patience and flexibility. I will keep you informed of any changes made to the class or University policies, and I ask that you also keep an open line of communication with the Professor regarding any information that may impact your ability to adhere to the course guidelines or schedule.

Office Hours:

Meeting during office hours is an opportunity for the Professor to get to know you better as a student and as a human being. Office hours are ideal for clarifying confusing subjects and exploring topics that interest you. The Professor is also available to discuss broader issues that college students face, such as balancing school and other life obligations, post-college plans, and personal issues affecting your academic performance (I may refer you to campus-based services if necessary). You may also choose to meet with the TA during office hours to discuss these issues; sometimes it's easier to talk to a fellow student than a professor. Regardless of who you choose to meet with, please come prepared for office hours: be ready to identify what information you already know and what information you would like to learn more about.

Email:

If you have a comment or question about the course or an assignment, you should first consider speaking up during class. Using the classroom as a public forum to ask and answer questions is the most equitable way to provide clarifying information to all students, and it helps reduce the number of duplicate emails I receive.

If you would like to discuss private information (e.g., grades, professional advice, etc.) over email, you should send a private message over Canvas. Canvas is a more secure platform than GatorMail/Outlook for discussing personal student information; students should refrain from using GatorMail/Outlook (autumn.mcclellan@ufl.edu) to discuss course matters.

Emails sent after 4:30PM may not receive a response until the next business day. I can only guarantee one response per day; please attend my office hours if your comment or question will require more attention. Please follow-up if you have not received a reply within two (2) business days.

Course Components:

Worksheets: 0% of Final Grade

Although completing the worksheets are the best way to retain the course information and prepare for the tests, they are not a graded component of the class. I want students to shift their understanding of learning from "something I do for others, or for a grade" toward "something I do to learn." The worksheets are the only study guides provided for the tests. Worksheets may be completed alone or with peers.

Attendance: 20% of Final Grade

It is difficult to accurately measure "participation" in a classroom setting, and most measures favor the contributions of extroverts over introverts. My (imperfect) strategy for gauging student participation is to grade attendance. Taking attendance also helps me to learn everyone's names!

Students will be awarded five (5) points for each class period in which they are present or have an excused absence, three (3) points for late arrivals or early departures, and zero (0) points for unexcused absences. This policy applies to both the regular class periods and the lab periods.

Tests: 80% of Final Grade

Students will be tested on their knowledge of information from the textbook, lectures, and worksheets. All tests should be considered cumulative; we will be building our knowledge around what we've previously learned, thus remembering the older material may be necessary to demonstrate your knowledge of the newer material. However, the tests generally correspond to the information and skills learned specifically in the assigned chapters. All tests will be completed without any assistance (e.g., closed-book, closed-note). There is NO cumulative final exam (i.e., covering all chapters). The tests are equally weighted; each test accounts for 20% of your final grade.

Grading:

Although I may provide opportunities for extra credit, students cannot exceed the maximum percentage possible for each grading component when calculating the final course grade. This would only affect students who average over 100% across all the assignments in a grading component (a rare circumstance), but the Canvas gradebook will overestimate the final course grade for these students; if applicable, I will manually adjust your grade on Canvas to reflect the maximum possible amount. The purpose of extra credit is to help you maximize your scores in a particular area, not to compensate for other grading components.

The University grading policies can be found at <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>

Your final course grade will be calculated based on the following components and weighting scheme:

Attendance	20%
Test 1 (Chapters 1-6)	20%
Test 2 (Chapters 7-9)	20%
Test 3 (Chapters 10-12)	20%
Test 4 (Chapters 13-14)	20%
<u>TOTAL</u>	<u>100%</u>

Final course grades will be calculated according to following grading scale. I will NOT "round grades up."

A	100 - 95%	C	76 - 73%
A-	94 - 90%	C-	72 - 70%
B+	89 - 87%	D+	69 - 67%
B	86 - 83%	D	66 - 63%
B-	82 - 80%	D-	62 - 60%
C+	79 - 77%	E	59 - 0%

What does a letter grade mean?

A = *Exemplary work*

Your work demonstrates a thorough understanding of the material that greatly exceeds the average.

B = *Good work*

Your work demonstrates a firm grasp on the material but you have some gaps in knowledge or process.

C = *Average work*

Your work suffers from substantial gaps in knowledge or process.

D = *Marginal Work*

Your work demonstrates a superficial understanding of the material and is barely acceptable.

E = *Unacceptable Work*

Your work fails to demonstrate any substantial understanding of the material.

How to Succeed in SYA 4930:

Many students worry about their performance in a statistics class because they feel they are "not good at math." Fortunately, statistics classes like this one mostly use basic mathematical operations (add, subtract, multiply, divide, square root, etc.), with which you should be familiar before taking this course. Bringing a calculator to class will significantly improve your speed and accuracy in calculating statistics, so I recommend you bring one to class every day. In addition to a calculator, you should also bring a writing utensil (pencils are preferred because mistakes are often made in learning statistics!), your textbook, and scrap paper to every class.

In order to be successful in this class, you must read the assigned texts and attend class consistently. When reading the textbook, you should take notes and organize the information in a way that makes sense to you.

You should also come to class prepared by bringing your textbook, your notes, your worksheets, a writing utensil, and extra paper.

Although you will not receive a grade for your worksheets, it is of the utmost importance to complete them and complete them on-time. These worksheets are designed to give you hands-on practice with statistics; through repeatedly calculating a statistic, it will become like a second-nature to you.

Academic Honesty and Integrity:

All UF students are bound by The Honor Pledge, which states: “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: ‘On my honor, I have neither given nor received unauthorized aid in doing this assignment.’”

The Honor Code (<https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct or any observed misconduct to the Professor, TA, or Dean of Students Office. If you have any questions or concerns, please consult with the Professor or TA.

For this course, students are allowed to work with others to complete the worksheets for each chapter. However, all tests must be completed individually without any assistance (closed-book, closed-note). The lab assignments are to be completed individually, but students will be learning how to complete the assignment together during class, so there will be some level of collaboration; all students must submit their own completed lab assignment that represents their own work and learning process.

Accessibility Accommodations:

There are a number of circumstances - physical or mental, temporary or long-term - that can make completing the course requirements unduly difficult for some students. The University has a process for identifying students in need of accommodations, and there are a wide variety of accommodations available (<https://disability.ufl.edu/faculty/academic-accommodations/>). If you need accommodations for successfully completing this course, you must first register with the Disability Resource Center (DRC).

Any students who are registered with the DRC and wish to use their accommodations in this class must submit a current accommodation letter to the Professor in a timely manner. Then, the student and the Professor will discuss how the accommodations will be applied to the coursework and the conditions that must be met in order to access the accommodations. Students cannot utilize their DRC accommodations in this class until they have discussed, agreed to, and signed an Accommodation Plan with the Professor.

Counseling and Mental Health Services:

It is very common for students to struggle with the rigors of schoolwork, the demands of work and student organizations, and/or relationships with friends and family. In many cases, it can be helpful to discuss these stresses and anxieties with peers or a professional. The Counseling and Wellness Center (CWC) offers a wide variety of services at no cost, including individual, couples, and group counseling (<https://counseling.ufl.edu/services/>). Counselors are available to meet online or by phone.

If you or a fellow student are in a crisis situation, you can call the CWC at 352-392-1575 or the Alachua County Crisis Center at 352-264-6789.

If there is an immediate threat to you or another person’s physical safety, you should call 911 or go to the nearest emergency room immediately.

Teacher Evaluations:

The University expects students to provide feedback on the quality of instruction in this course based on a variety of criteria. These evaluations, called GatorEvals, are typically open during the last two weeks of the semester, and students will be notified via email and Canvas notifications when they are open. GatorEvals can also be

accessed directly at <https://ufl.bluera.com/ufl/>. Summary results of these evaluations are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

GatorEvals are primarily used in three ways: the Professor's annual performance review, the Professor's Tenure and Promotion materials, and/or for teaching and mentoring awards. In other words, the audience for these evaluations are professors and administrators. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>.

The Professor may also request anonymous feedback from students during the semester. These evaluations give current students an opportunity to provide feedback that might improve their course experience before the semester ends. The Professor will review these evaluations, and may make changes to the course based on the feedback provided.

Monday	Wednesday	Friday
<i>August</i>		
(FORMAT) Date Topic to be covered in class ----- Reading assignment to be completed <u>after</u> class on this date, <u>before</u> the next class period	23 Introductions & Syllabus ----- Read Chapter 1	25 NO CLASS
28 Intro to Statistical Thinking ----- Read Ch. 2	30 Measurement and Data Quality ----- Read Ch. 3	
<i>September</i>		
		1 Issues in Data Preparation ----- No readings – Enjoy!
4 NO CLASS Labor Day	6 Issues in Data Preparation ----- Read Ch. 4	8 Visual Representations of Data ----- No readings – Enjoy!
11 Visual Representations of Data ----- Read Ch. 5	13 Measures of Central Tendencies ----- Read Ch. 6	15 Measures of Dispersion ----- No readings – Enjoy!
18 Measures of Dispersion ----- No readings – Enjoy!	20 STATA DAY (meet @ lab location) ----- Study for Test 1	22 Test 1 ----- Read Ch. 7
25 Sampling Distributions ----- No readings – Enjoy!	27 Sampling Distributions ----- No readings – Enjoy!	29 Sampling Distributions ----- Read Ch. 8
<i>October</i>		
2 Confidence Intervals ----- No readings – Enjoy!	4 Confidence Intervals ----- No readings – Enjoy!	6 NO CLASS Homecoming
9 Confidence Intervals ----- Read Ch. 9	11 Hypothesis Testing ----- No readings – Enjoy!	13 Hypothesis Testing ----- No readings – Enjoy!
16 Hypothesis Testing ----- No readings – Enjoy!	18 STATA DAY (meet @ lab location) ----- Study for Test 2	20 Test 2 ----- Read Ch. 10
23 Hypothesis Testing ----- No readings – Enjoy!	25 Hypothesis Testing ----- No readings – Enjoy!	27 Hypothesis Testing ----- Read Ch. 11
30 Cross-Tabs & Chi-Squares ----- No readings – Enjoy!		

<i>November</i>		
	1 Cross-Tabs & Chi-Squares ----- No readings – Enjoy!	3 Cross-Tabs & Chi-Squares ----- Read Ch. 12
6 ANOVA ----- No readings – Enjoy!	8 ANOVA ----- No readings – Enjoy!	10 NO CLASS Veterans Day
13 STATA DAY (meet @ lab location) ----- Study for Test 3	15 Test 3 ----- Read Ch. 13	17 Correlation & Regression ----- Re-read Ch. 13 (trust me, it makes a difference!)
20 Correlation & Regression ----- Read Ch. 14	22 NO CLASS Thanksgiving Break	24 NO CLASS Thanksgiving Break
27 Multiple Regression ----- No readings – Enjoy!	29 Multiple Regression ----- No readings – Enjoy!	
<i>December</i>		
		1 Review for Test 4 ----- Study for Test 4
4 STATA DAY (meet @ lab location) ----- Study for Test 4	6 Test 4	