

SOCY201: Introductory Statistics for Sociology (4 credits) Summer 2023

Instructor: Hope Xu Yan (she/her) Email: xyan9@terpmail.umd.edu Office hours: by appointment

Course dates: May 30 – July 7, 2023

Course times: Online Monday & Tuesday 9:00 am – 11:00 am

Course Zoom link: [Hidden]

Welcome to Sociology 201!

This is an introductory course in statistical methods used in the social sciences. Instead of focusing on the mathematics of statistics, we will emphasize statistics as tools for improving our understandings of social phenomena. The material covered will 1) help you critically interpret quantitative information encountered every day in the media, 2) prepare you for more advanced courses, and more importantly, 3) build your abilities to explore more advance statistical knowledges through self-learning.

Topics to be covered include basic concepts related to descriptive statistics, sampling distributions, statistical inference, hypothesis testing, correlation, and regression.

Course prerequisite(s)

SOCY 100 and MATH 111 or equivalent. Not open to students who have completed BMGT 231, ENEE 324, or STAT 400. Credit will be granted for only one of the following: AREC 484, BIOM 301, BMGT 230, CNEC 400, ECON 321, EDMS 451, GEOG 305, GVPT 422, PSYC 200, SOCY 201, URSP 350, or TEXT 400.

Get in touch with me

Email: The best way to contact me is via email (<u>xyan9@terpmail.umd.edu</u>). I will normally respond within 24 hours Monday through Friday between 9 am and 6 pm. I have an intense schedule outside the classroom, so please allow me enough time to response when reaching out. It will be difficult for me to help if you contact me the night before the deadline.

Office hours: I will not hold regular office hours, but you can email me to schedule a time to meet via Zoom (with video on or off). Please briefly describe your questions or what do you want to discuss when sending email so that I can be better prepared.

Course Materials

Textbook

For this course, we will use parts of a free online textbook titled *Introductory Statistics*. You can access it online here: https://openstax.org/details/books/introductory-statistics.

You can learn more about OpenStax and how to access their books by watching a YouTube video called Accessing your OpenStax Textbook: https://www.youtube.com/watch?v=UntCX-E6vRc.

Data

One critical part of this course is to conduct analysis using real-life data. We will use data from the General Social Survey (GSS). The GSS data can be accessed and downloaded through: https://gssdataexplorer.norc.org/home. Basic data analysis can be conducted using an online platform: https://sda.berkeley.edu/sdaweb/analysis/?dataset=gss18.

Statistical software

Because this is an online summer course and not all students will have access to the statistical software *Stata* during the course time, I will only provide instructions on how to use *Stata* and *Stata* codes for statistical methods covered in the class. If interested, you can access these files on ELMS and contact me if you have any questions about using *Stata*.

Course Assignments and Grading

There are three types of assignments for this course: Quizzes, Homework, and Exams.

Quiz: There are five quizzes. Most quizzes have 15 multiple-choice questions. You can take each quiz as many times as you like and only the highest grade is recorded. I encourage you to take the quizzes until you earn a perfect score.

Homework: *There are four homework assignments*. Unlike the quizzes and exams, the homework assignments require you to calculate and interpret different statistics. The homework assignments require your time and attention so do not wait until the last minute to work on them. You should allocate some time each day to work on the homework assignments. Homework answer keys will be released shortly after the assignments have been turned in.

Exams: *There are two exams*. They have multiple-choice questions and are based on material in the course modules and other assignments. All examinations are open book and open notes. But, you are not allowed to communicate with other people or use Internet resources to search for or otherwise find answers for questions on the examinations while you are taking the tests.

Grading

Grades are important but not everything. Grades are still widely used to measure our performance in the university, so I must assign them. However, if you attend all the classes, try your best on the assignments, and communicate with me if you are having a hard time with course material or in your life outside the classroom, you will pass. All assessment scores will be posted on the course

ELMS page. If you would like to review any of your grades or have questions about how something was scored, please email me to schedule a time for us to meet and discuss. The course assignments will be weighted as follows:

 Quizzes
 10%

 Homework
 40%

 Exam 1
 25%

 Exam 2
 25%

Letter grades will be assigned using the following guidelines:

Letter grade	A	В	С	D	F
Numerical range	90-100	80-89	70-79	60-69	Below 60
	A+ 97-100	B+ 87-89	C+ 77-79	D+ 67-69	
	A 93-96	В 83-86	C. 73-76	D 63-66	
	A- 90-92	B- 80-82	C- 70-72	D- 60-62	

Late work policy

This is a fast-paced course so getting behind on your work will make it very hard to complete the course with a passing grade. No credit for assignments can be given once the homework answer key has been released or the exams discussed in class.

This Course is for All Students

I aim to provide a welcoming environment and equitable learning experience for all students. If you face difficulties in this course, please let me know.

Build an inclusive class environment

Members of this class represent a rich variety of backgrounds and perspectives. I am committed to providing an inclusive atmosphere for learning that respects diversities. I would like all members to:

- Respect each other' unique experiences, values, and beliefs. Appreciate the opportunity to learn from each other in this community.
- Respect the right of students to be addressed by the names and pronouns that correspond to their gender identities, including the use of non-binary pronouns.
- Keep confidential any discussions that the community has of a personal or professional nature, unless the speaker gives explicit permission to share what they have said.

Make this course accessible to students with physical or mental difficulties

Navigating education can often be more challenging if you have physical or mental difficulties. I want you to achieve your highest capacity in this class. Please let me know if you have difficulties, for example, in understanding course materials, engaging with other students, or demonstrating your skills and knowledge on assignments.

Support students with responsibilities outside the classroom

Students may have responsibilities outside the classroom such as caregiving and employment, which set barriers for attending classes and completing coursework. If you are struggling with multiple roles and are comfortable to reveal your current status and the challenges you face, I am happy to solve problems with you together and make you feel supported when striving for school-family-work balance.

Policies and Resources

Academic integrity

The University's <u>Code of Academic Integrity</u> is designed to ensure that the principles of academic honesty and integrity are upheld. In accordance with this code, the University of Maryland does not tolerate academic dishonesty. Please ensure that you fully understand this code and its implications because all acts of academic dishonesty will be dealt with in accordance with the provisions of this code. All students are expected to adhere to this Code. It is your responsibility to read it and know what it says, so you can start your professional life on the right path. As future professionals, your commitment to high ethical standards and honesty begins with your time at the University of Maryland.

It is important to note that course assistance websites, such as CourseHero, or AI generated content are not permitted sources, unless the instructor explicitly gives permission. Material taken or copied from these sites can be deemed unauthorized material and a violation of academic integrity. These sites offer information that might be inaccurate or biased and most importantly, relying on restricted sources will hamper your learning process, particularly the critical thinking steps necessary for college-level assignments.

Additionally, students may naturally choose to use online forums for course-wide discussions (e.g., Group lists or chats) to discuss concepts in the course. However, collaboration on graded assignments is strictly prohibited unless otherwise stated. Examples of prohibited collaboration include: asking classmates for answers on quizzes or exams, asking for access codes to clicker polls, etc. Please visit www.ugst.umd.edu/courserelatedpolicies.html for the Office of Undergraduate Studies' full list of campus-wide course-related policies.

Accessibility and disability services

The University of Maryland is committed to creating and maintaining a welcoming and inclusive educational, working, and living environment for people of all abilities. The University of Maryland is also committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the University, or be subjected to discrimination. The Accessibility & Disability Service (ADS) provides reasonable accommodations to qualified individuals to provide equal access to services, programs and activities. ADS cannot assist retroactively, so it is generally best to request accommodations several weeks before the semester begins or as soon as a disability

becomes known. Any student who needs accommodations should contact me as soon as possible so that I have sufficient time to make arrangements.

For assistance in obtaining an accommodation, contact Accessibility and Disability Service at 301-314-7682, or email them at adsfrontdesk@umd.edu. Information about sharing your accommodations with instructors, note taking assistance and more is available from the Counseling Center.

Excused from class for religious observances

In accordance with University policy, we will try to accommodate reasonable and timely requests for absences due to religious observances. If you participate in religious holidays that will affect your class attendance or coursework, please let me know as soon as possible to make appropriate arrangements.

Student Resources and Services

Taking personal responsibility for your own learning means acknowledging when your performance does not match your goals and doing something about it. I hope you will come talk to me so that I can help you find the right approach to success in this course, and I encourage you to visit <a href="https://www.uman.com/www.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.com/www.uman.co

In particular, everyone can use some help sharpening their communication skills (and improving their grade) by visiting <u>UMD's Writing Center</u> and schedule an appointment with the campus Writing Center.

You should also know there are a wide range of resources to support you with whatever you might need (<u>UMD</u>'s <u>Student Resources and Services website</u> may help). If you feel it would be helpful to have someone to talk to, visit <u>UMD</u>'s <u>Counseling Center</u> or <u>one of the many other mental health resources on campus</u>.

Notice of Mandatory Reporting

Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking: As a faculty member, I am designated as a "Responsible University Employee," and I must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to UMD's Title IX Coordinator per University Policy on Sexual Harassment and Other Sexual Misconduct.

If you wish to speak with someone confidentially, please contact one of UMD's confidential resources, such as <u>CARE to Stop Violence</u> (located on the Ground Floor of the Health Center) at 301-741-3442 or the <u>Counseling Center</u> (located at the Shoemaker Building) at 301-314-7651.

You may also seek assistance or supportive measures from UMD's Title IX Coordinator, Angela Nastase, by calling 301-405-1142, or emailing titleIXcoordinator@umd.edu.

To view further information on the above, please visit the <u>Office of Civil Rights and Sexual Misconduct's</u> website at <u>ocrsm.umd.edu</u>.

Basic Needs Security

If you have difficulty affording groceries or accessing sufficient food to eat every day, or lack a safe and stable place to live, please visit <u>UMD's Division of Student Affairs website</u> for information about resources the campus offers you and let me know if I can help in any way.

Course evaluation

Please submit a course evaluation through Student Feedback on Course Experiences in order to help faculty and administrators improve teaching and learning at Maryland. All information submitted to Course Experiences is confidential. Campus will notify you when Student Feedback on Course Experiences is open for you to complete your evaluations at the end of the semester. Please go directly to the <u>Student Feedback on Course Experiences</u> to complete your evaluations. By completing all of your evaluations each semester, you will have the privilege of accessing through Testudo the evaluation reports for the thousands of courses for which 70% or more students submitted their evaluations.

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Course Schedule

Date	Class content	Assignments	
1. May 30	Introduction and frequency distribution	Quiz 1	
2. June 5	Central tendency and dispersion	Quiz 2	
3. June 6	Lab on Homework 1 & Z-score	HW 1 due by the end of week	
4. June 12	Single sample means	Quiz 3	
5. June 13	Lab on HW 2 & Differences of two means	HW 2 due by the end of week	
6. June 19	No class	Mid-term exam due on June 26	
7. June 20	ANOVA & Chi-square	Quiz 4	
8. June 26	Lab on HW 3 & Correlation	HW 3 due by the end of week	
9. June 27	Simple linear regression	Quiz 5	
10. July 3	Lab on HW 4 & Multiple linear regression	HW 4 due by the end of week	
11. July 4	No class	Final exam due on July 9	