

SOCI. 33004: SOCIAL DATA AND ANALYSIS

SPRING SEMESTER 2026

SYLLABUS ONLINE AT

<https://yangwang.hosted.uark.edu/soci33004/soci33004.htm>

CLASS INSTRUCTOR Dr. Song Yang
Office Hours: Wednesday 10:30 – 11:30 or by Appointment
Office Address: 228 Old Main
Office Phone: 575-3206
Email: yangwang@uark.edu

LAB INSTRUCTOR Name: Parker Bowman
Email: ptbowman@uark.edu

Other Information such as office hours, locations, and phone number for Parker Bowman, check with Parker directly.

PLACE AND TIME FOR THE CLASS

Lecture Place: Human Environmental Sciences Building (HOEC) 217
Lecture Time: MWF 9:40 – 10:30 AM
January 12 (Monday) 2026 to April 29 (Wednesday) 2026

Lab Place: 205 Old Main
Lab1: 12:55 – 1:45 PM Monday
Lab2: 12:30 – 1:20 PM Tuesday

COURSE DESCRIPTION AND OBJECTIVES

Social statistics is an extremely important class for sociology majors and students from all other relevant disciplines for their future academic pursuits and social practices. In this class, we will start with some basic concepts such as statistics and variables, univariate analyses, and inferential statistics, move to bivariate analyses including regression and correlation, and finish with multivariate analyses including multiple regression and correlation. Upon finishing this course, students should be able to conduct statistical analysis in their substantive areas by applying appropriate statistic techniques.

REQUIRED TEXTBOOK

Social Statistics for a Diverse Society by Frankfort-Nachmias, Chava, Anna Y Leon-Guerrero, and Georgiann Davis 10th edition, CA: Sage

SBN-10: 1071910477
ISBN-13: 978-1071910474

CALCULATOR

You need a calculator for this class. A **scientific** calculator with functions such as square, and square root is perfectly sufficient for this class. An example of this type is a Texas Instrumental Scientific Calculator that costs you around \$20.00 at Best Buy or Wal-Mart. You can also use iPhone built-in calculator (the scientific version). Just for this class, a super-power hand calculator with fancy features such as graphing, normally costs you more than \$50.00, is definitely overkill!

GRADING for SOCI33004 Lecture Portion

The class contains three exams and attendance. The following table shows the score distribution.

Exam 1	25%
Exam 2	25%
Exam 3	40%
<u>Attendance</u>	<u>10%</u>
Total	100 %

The following chart converts raw scores to letter grade

A :	90% - 100%
B :	80% - 89%
C :	70% - 79%
D :	60% - 69%
F* :	Below 60%

The grading will be based on absolute scale rather than a curve. Regular and active participation is the key to the success of the class. Notice that we do not have plus or minus signs in the grading system. The decimal values will be rounded off according to the 4/5 rule. For example, 90.5 will be considered as 91, whereas 90.4 will be considered as 90. The lab instructor will independently manage his own grades. Therefore, it is quite likely that you receive different grades between the lecture and the lab.

* To receive an F for this course, you not only need to be at the bottom 10% of the class grade, but also need to receive total raw score less than 60 out of 100. If your score fulfills either conditions but not both, your grade will be upgraded to D.

GRADING for SOCI33004 Lab Portion

Please check with the lab instructor Parker Bowman, who will have a separate grading policy for your lab performance.

GRADING for the SOCI33004 Combined, this is your final grade for SOCI33004

The lecture portion of this class is 3 credit hours, while the lab portion of this class is 1 credit hour. So, to compute your final grade for the class, we have this formula

Your final grade for SOCI33004 =

$$\frac{(Your\ grade\ point\ of\ the\ lecture\ portion \times 3 + Your\ grade\ point\ of\ the\ lab\ portion \times 1)}{4}$$

In the event that your grade is fractional due to the differences between the lecture and lab grade, we use the 4/5 rule, those with 5 and above will be rounded up and those with 4 and lower will be rounded down.

Here a couple of examples

Student Amy received an A (4.0) in the lecture and a B (3.0) in the lab, what is her final grade for SOCI33004

$$Amy\ Final\ Grade = \frac{4.0 \times 3.0 + 3.0 \times 1}{4} = 3.75, \text{ which will be rounded up to } 4.00 \text{ an A}$$

Student John received a B (3.0) in the lecture and an A (4.0) in the lab, what is his final grade for SOCI33004

$$John\ Final\ Grade = \frac{3.0 \times 3.0 + 4.0 \times 1}{4} = 3.25, \text{ which will be rounded down to } 3.0, \text{ a B}$$

POLICIES

Incomplete will NOT be granted except for prior agreement with the instructor for some extreme situations.

Late Assignment will NOT be accepted except for prior consent from the instructors for some extreme cases.

Attendance is extremely crucial for this course. I will be awarding you 10 points (10% of your total grade) for your participation in an individual meeting between you and me. I will be distributing a meeting schedule within three weeks after the semester starts.

However, I shall remind you that Good Classroom Conduct is indispensable to your completion of this course. Disruptive behaviors, such as constant interruptions that interfere with classroom lecturing or presentations made by the instructor or other students, confrontational behaviors toward the instructor should be avoided by all means. I will be sending out warning note to those students exhibiting disruptive behaviors, inviting them for a personal meeting between me and the students for a solution to their disruptive behaviors. If the students refuse to participate in the meeting or after the meeting the behaviors are not corrected immediately, I will be deducting 10 points from their total grade and produce written document for such decision. The 10-point deduction could be exercised multiple times for those who repeatedly commit disruptive behaviors.

Academic Integrity is essential to completing your courses. Violations carry severe consequences; please consult the University of Arkansas webpage for the details (<http://provost.uark.edu/245.php>)

Exam Makeup will NOT be granted unless with prior consent from the instructor for some very rare situations.

Email is the best way to contact me. I check my email many times a day, and normally respond your email within a couple of days.

Students with CEA request must request a meeting with me. The meeting is to discuss how to accommodate your needs. You can request such meeting any time during the semester. However, keep in mind that we must have such meeting before we can provide any CEA accommodations.

Being late to the class should be avoided by all means. I strongly recommend you NOT to come into the class if you are more than 10 minutes late for the class. Repeated offenses to this are considered disruptive behaviors, and maybe subject to the point deduction (see the attendance policy).

I will determine the inclement weather and send you a group-email before 7:30 am if I decide to cancel classes due to the inclement weather condition. If U of A issues an inclement weather in effect, our class is automatically cancelled.

Grade Disputes for SOCI33004 lecture portion should be addressed directly to the instructor, Song Yang, whereas dispute about grades for SOCI33004 lab portion should be discussed with the lab instructor, Parker Bowman.

We will try to synchronize our hand-back of your homework and the exams, so you would have the homework assignments that correlate with the exams before you take the exam. However, this is much easier said than done. Homework grading may not complete before the

test takes place. If you wish to make use of the homework for your tests, one foolproof method is to make a personal copy of your homework assignments before you turn them in and keep your copies for your preparation for the exams. In case you have questions about the homework that may affect your preparation of the exam, contact the instructor for help.

Grade release/notification is taking place at the classroom only during the class sessions. If you miss the classes when we hand back your homework or exams, you can stop by my office. Such policy applies during the semester and after the semester. As we will be having no classes after the semester, any inquiries about your grades will be handled through your personal visit to my office (223 Old Main). No need for scheduling an appointment, I should be in my office morning 9:00 to 11:00 Monday through Friday. We will NOT be responding to your email or phone inquiries of your grades during and after the semester.

Good faith effort is expected, especially when students are called upon to resolve the disruptive behaviors. Those good faith efforts include, but not limited to, respectful behaviors to the instructor, responsible act by students to correct those disruptive behaviors or other issues that impede class lecturing and instructor's efforts to manage students. Violations to good faith efforts exemplify in rude/disrespectful treatment to the instructor, repeatedly dispute on the issues that were clarified by the instructor, excessive demand placed to the instructor to elucidate the issues that were clearly communicated with the students. Students exhibiting those "bad faith acts" after they receive the "disruptive behavior notice" are subject to 10-point deduction to their total grade.

The decision to hire a tutor or not is totally at your own personal discretion. The lab instructor and myself cannot be served as tutor, and we do NOT have anybody to recommend you as tutor. Tutor and instructor are very different: instructor completes the lecture and address specific questions raised by students. Tutors are held accountable for those who hired them. Things that tutor can do, but instructors will NOT are 1) students missing several weeks of classes and need a repeat of the class materials, and 2) students who do not understand the materials and need repeat lectures.

Emotional control is to be expected at the classroom and in the faculty office, during the lectures, tests, and office visits. Classrooms and faculty offices are professional settings, and we expect professional conducts from students. Previously we experienced outright crying during the exams, outburst of angers, frustration/aggression during lectures, office visits to faculty's office, or even in email communications. Those incidents are rare occasions, but they did occur in the past. Students who have difficulty containing their personal feeling should consult professionals for help. When we see such issues with lack of emotional controls, we may refer you to UARK Pat Walker Health Center (CAPS) (<https://health.uark.edu/mental-health/>) for professional helps. Noted that CEA office may prescribe you with class accommodations, but they are NOT trained professionals who can help you to deal with those issues.

Flu, Covid-19 or any other contagious illness that you are diagnosed with, please follow the doctor's note for quarantine before coming back to the class. Your health, as well as those around you in the same classroom are the utmost important aspects of the learnings here at

UARK. Please be sure to notify us of those conditions and we will provide guidance in terms of making up the missing.

The instructor holds the right to interpret those policy terms

CAPS and UofA Cares

As a student, you may experience a range of issues that can cause barriers to learning such as relationship issues, anxiety, depression, alcohol/drug issues, difficulty concentrating, and lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce one's ability to participate in daily activities, and the University of Arkansas has resources to help! If you or a friend are in need of assistance, please reach out to the following resources:

- **U of A CARES** – resources, referrals, and advocacy for students in need, <https://uofacares.uark.edu/>
- **UARK Wellness/Wellness Coaching** – supporting academic and personal success, <https://urec.uark.edu/wellness/wellness-coaching.php>
- **Counseling and Psychological Services (CAPS)** – (479) 575-5276, services available 24/7 (after hours by phone), <https://health.uark.edu/mental-health/index.php>
- **Substance Education, Assessment, and Recovery (SEAR)** sear@uark.edu, <https://health.uark.edu/sear/>

EMERGENCY PROCEDURES

Many types of emergencies can occur on campus; instructions for specific emergencies such as severe weather, active shooter, or fire can be found at emergency.uark.edu.

Severe Weather (Tornado Warning):

- Follow the directions of the instructor or emergency personnel
- Seek shelter in the basement or interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building
- Stay in the center of the room, away from exterior walls, windows, and doors

Violence / Active Shooter (CADD):

- **CALL-** 9-1-1
- **AVOID-** If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY-** Barricade the door with desk, chairs, bookcases or any items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it's safe.
- **DEFEND-** Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

CLASS SCHEDULE

WEEK January 12

Orientation to the class.

Basics in Social statistics

WEEK January 19

No class on January 19 (Monday) for Martin Luther King Day Holiday

Frequency and Percentage Distributions

WEEK January 26

Measures of central tendency (1)

Measures of central tendency (2)

WEEK February 2

Measures of central tendency (3)

Measures of central tendency (4)

WEEK February 9

Measures of variability (1)

Measures of variability (2)

WEEK February 16

Measures of variability (3)

Measures of variability (4)

WEEK February 23

TEST 1 on February 23 (Monday) in class for Group A

TEST 1 on February 25 (Wednesday) in class for Group B

WEEK March 2

Z score and Z distribution

Basics of bivariate statistics

WEEK March 9

Bivariate table (1)

Chi-square test (1)

WEEK March 16

Chi-Square test (2)

Chi-square test (3)

WEEK March 23

No classes, enjoy your spring break

WEEK March 30

Measures of Association (1)

Measures of Association (2)

WEEK April 6

Test 2 on April 6 (Monday) in class for Group B

Test 2 on April 8 (Wednesday) in class for Group A

WEEK April 13

Analysis of Variance (ANOVA) (1)

Analysis of Variance (ANOVA) (2)

WEEK April 20

Analysis of Variance (ANOVA) (3)

Analysis of Variance (ANOVA) (4)

WEEK April 27

Review of class, Reading day on May 1 Friday

WEEK May 4 Final Exam Week

Final exam on May 4 (Monday) from 10:15 am to 12:15 pm in the classroom