

## Syllabus: STAT 303 Sections 501, 502, 504, 505 Spring 2025

### Course Information

Course Number: STAT 303

Course Title: Statistical Methods

Section	Class Meeting Time	Location
501	TR 12:45-2:00 pm	BLOC 150
502	MWF 10:20-11:10 am	BLOC 150
504	MWF 9:10-10:00 am	BLOC 150
505	MWF 12:40-1:30 pm	BLOC 113

### Instructor Details

Instructor: Dr. Alexander Roiterchtein

Office: BLOC 404A

E-Mail: [alexander@stat.tamu.edu](mailto:alexander@stat.tamu.edu)

Office Hours: T 2:00 - 3:00 p.m., W 1:30-2:30 pm (in person)

Or by appointment (in-person or via Zoom)

### Teaching Assistant Details

There will be TAs for all STAT 303 sections this semester. TAs will be hosting office hours as well as weekly lab/recitation sessions for review. Lab/recitation sessions are not required but are very much encouraged. Details are to be announced (TBA).

Name and Contact Information	Office Hours and Location	Lab Session/Recitation Hours and Location
Ms. Joyce Su <a href="mailto:joycesu@tamu.edu">joycesu@tamu.edu</a>	MF, 9:00-11:00am, BLOC 449A	Mon 11:30am-12:30pm, BLOC 162
Ms. Laura Huang <a href="mailto:rhuang93@exchange.tamu.edu">rhuang93@exchange.tamu.edu</a>	MW, 11:10am-12:10pm, BLOC 449A	Fri 4:00-5:00pm, BLOC 162

### Course Description

This course is designed to introduce statistical thinking. Statistical thinking involves, among other things, making decisions based on data rather than personal opinion or belief. Such decisions often must be made in the face of variability and its resulting uncertainty; part of our goal will be to measure the amount of uncertainty present. Topics covered include

- Numerical and graphical methods of describing one and two variables
- Gathering data
- Basic probability, sampling distributions for sample means and proportions
- Confidence intervals and hypothesis testing for means and proportions
- Simple linear regression analysis, test for independence, and One-way ANOVA

## Course Prerequisites

*Math 141, or Math 166 or Math 168 or equivalent*

## Course Learning Outcomes

By the end of the semester, the student should be able to:

- Identify, calculate, and interpret appropriate graphs, summary statistics, and inferential statistics
- Use data to identify appropriate conclusions about a population
- Explain and compare properties of summary and inferential statistics
- Identify weaknesses in studies

## Textbook and/or Resource Materials

- **Course website:** For this course, you will be required to have access to CANVAS. This site will contain announcements and other information concerning the course. In addition, it will be used to distribute class materials and grades. **Please check the website regularly;** any information posted on it will be as valid as if it was mentioned in class. *All lecture notes and related recourses will be posted in Canvas as needed.*
- **Textbook:** we will be using a free textbook called *OpenIntro Statistics* (Fourth Edition). You can download a free copy of this book using the following instructions (Note: when you download the pdf, it will include the first four editions and we will be using the 4th edition).
  1. Go to <https://leanpub.com/os>
  2. Set price to \$0 for free (or other amount if you would contribute.)
  3. Add the eBook to your cart and finalize.
- **Homework:** We will be using a free resource called **MyOpenMath** for homework assignments. **If you fail to follow the steps below to create your account, I will be unable to upload your grades on Canvas gradebook.**
  1. Go to <https://www.myopenmath.com/>
  2. Create a student account: **You must use your UIN as your username.**
  3. Your **First** and **Last** name must be the same as in Howdy (please Do NOT use nicknames/abbreviations/initials).
  4. The course ID and enrollment key can be found in a Canvas announcement of 1/14/25.
- **Calculator:** A TI-83/84 plus is somewhat more helpful than other types of calculators. But you just need a calculator that can take square roots and do calculations to at least 5 decimal places. **Any calculators are allowed when taking exams.**

## Grading Policy

- **Homework - 25%** Assignments will be available on MyOpenMath. Usually, one homework assignment per week will be assigned, it typically will be due one week from the day assigned.  
**One lowest homework grade will be dropped at the end of semester.**
- **Midterm Exams - 40% (20% each - 2 exams)** Take midterm exams during your regular class meeting time. Exam schedules are listed under the "Course and Exam Schedule". Exams are closed note/book, but you may bring **TWO (4 sides in total) 8.5 X 11" cheat sheet** to each exam. Make your own handwritten or typed cheat sheet with your name on the sheet. A calculator as described under the course material is needed.

### **MIDTERM I DATES (during the regular class time):**

- Section 501: Thursday, Feb 27
- Sections 502, 504, and 505: Friday, Feb 28

### **MIDTERM II DATES (during the regular class time):**

- Section 501: Thursday, March 27
- Sections 502, 504, and 505: Friday, March 28

- **Final Exam - 25%** Final exam is comprehensive with a strong focus on the newer material. The date and time of the final exam are listed at the end of the teaching schedule table. Same midterm exam rules apply except that you may use up to **TWO (4 sides in total) cheat sheets**.

**FINAL EXAM DATE (SECTION 501): Tue, May 6<sup>th</sup>, 8:00am-10:00am, BLOC 150**

**FINAL EXAM DATE (SECTION 502): Mon, May 5<sup>th</sup>, 8:00am-10:00am, BLOC 150**

**FINAL EXAM DATE (SECTION 504): Fri, May 2<sup>nd</sup>, 8:00am-10:00am, BLOC 150**

**FINAL EXAM DATE (SECTION 505): Fri, May 2<sup>nd</sup>, 10:30am-12:30pm, BLOC 113**

- **Weakly attendance quizzes – 10%**
- **Extra credit:** Several extra credit opportunities may be brought throughout the semester.

## Time and Effort

It should be emphasized that this course will cover a great deal of material at a rapid pace. As a rule of thumb, you should expect to spend a minimum of 2 hours for every hour spent in class reviewing material covered in lecture and homework. Students who have had difficulty in previous quantitative courses, or who have not had such a course in several semesters, may find that this course requires a considerable amount of preparation and extra study time, and should plan accordingly.

## University Policies

This section outlines the university level policies. The TAMU Faculty Senate established the wording of these policies.

### Attendance Policy

The university views class attendance and participation as an individual student responsibility. Students are expected to attend class and to complete all assignments.

Please refer to [Student Rule 7](#) in its entirety for information about excused absences, including definitions, and related documentation and timelines.

### Makeup Work Policy

Students will be excused from attending class on the day of a graded activity or when attendance contributes to a student's grade, for the reasons stated in Student Rule 7, or other reason deemed appropriate by the instructor.

Please refer to [Student Rule 7](#) in its entirety for information about makeup work, including definitions, and related documentation and timelines.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" ([Student Rule 7, Section 7.4.1](#)).

"The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" ([Student Rule 7, Section 7.4.2](#)).

Students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. ([See Student Rule 24](#)).

### Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" ([Section 20.1.2.3](#),

[Student Rule 20](#)).

### **Texas A&M at College Station**

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at [aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

## **Americans with Disabilities Act (ADA) Policy**

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources office on your campus (resources listed below). Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

### **Texas A&M at College Station**

*Disability Resources is located in the Student Services Building or at (979) 845-1637 or visit [disability.tamu.edu](http://disability.tamu.edu).*

## **Title IX and Statement on Limits to Confidentiality**

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see [University Rule 08.01.01.M1](#)):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, a person who is subjected to the alleged conduct will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

### **Texas A&M at College Station**

*Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with [Counseling and Psychological Services](#) (CAPS).*

*Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's [Title IX webpage](#).*

## **Statement on Mental Health and Wellness**

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in healthy self-care by utilizing available resources and services on your campus.

### **Texas A&M College Station**

*Students who need someone to talk to can contact [Counseling & Psychological Services](#) (CAPS) or call the [TAMU Helpline](#) (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at [suicidepreventionlifeline.org](https://suicidepreventionlifeline.org).*



