FALL 2025 MATH 1680.231-3 Elementary Probability and Statistics Lab

Instructor Information

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Hello! My name is Aissatou Dieng, and I am excited to be your instructor for this class. I am passionate about Math and Science, and I'm eager to share that enthusiasm with you. I have experience teaching a variety of STEM subjects and fluency in both French and Wolof. Outside of teaching, I enjoy expressing my creativity through painting and design. I look forward to a great semester together.

How to Communicate with Your Instructor

Please reach out to me if you have questions, need help, or want to let me know about something that affects your engagement with the class. There are two ways to contact me outside of class.

- **Canvas:** Send me a message using the Canvas Inbox.
- **Email:** Send me an email with "MATH 1680.231," "MATH 1680.232," or "MATH 1680.233" in the subject line. *To protect your privacy, questions about your academic performance must be sent from your UNT email account.*

You may expect a response within two business days. If you do not hear from me within that timeframe, feel free to send a reminder.

Course Description

Computer lab associated with MATH 1680.210 Elementary Probability and Statistics. Students enrolled in MATH 1680.210 must also enroll in one of the following lab sections:

- MATH 1680.231 M 8:00-8:50 am GAB 511
- MATH 1680.232 M 9:00-9:50 am GAB 511
- MATH 1680.233 M 10:00-10:50 am GAB 511

This is a 15-week, face-to-face computer lab that meets for one hour per week. Students will practice designing statistical studies, collecting data, and analyzing data using Microsoft Excel.

Learning Objectives

By the end of the semester, students will be able to:

- Collect data using appropriate sampling methods
- Construct frequency tables and relative frequency tables
- Construct bar graphs, pie charts, doughnut charts, histograms, and box-and-whisker plots
- Calculate the mean, median, and mode(s) of a data set
- Find percentile and quartiles

- Calculate the range, interquartile range, and standard deviation of a data set
- Construct scatter plots of two-variate data
- Compute the linear correlation coefficient between two variables
- Find the least-squares regression line and use it to make predictions, perform residual analysis, and find the coefficient of determination
- Find the probability of simple and compound events
- Construct and analyze contingency tables
- Calculate the expected value and standard deviation of discrete random variables
- Calculate probabilities using the binomial and normal distributions
- Estimate population means and population proportions using random samples
- Construct confidence intervals for population means and population proportions
- Test hypotheses about population means and population proportions

Required Materials

This course has digital components. To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System (https://clear.unt.edu/supported-technologies/canvas/requirements). Students will also need:

- Microsoft Office 365 (https://it.unt.edu/installoffice365)

I also recommend that you bring a scientific or graphing calculator to both lecture and lab. If circumstances change, you will be informed of other technical needs to access course content. Information on how to be successful in a digital learning environment can be found at Learn Anywhere (https://online.unt.edu/learn).

How to Succeed in this Course

- Attend lab every week
- Arrive on time and stay until the end of the class period
- Understand the logic behind the labs
- Don't be afraid to ask me for help
- If you finish the lab project early, you may work on your Knewton Alta assignments

UNT strives to offer you a high-quality education and a supportive environment, so you learn and grow. As a faculty member, I am committed to helping you be successful as a student. To learn more about campus resources and information on how you can be successful at UNT, go to unt.edu/success and explore unt.edu/wellness. To get all your enrollment and student financial-related questions answered, go to scrappysays.unt.edu.

There are many academic resources available to help you succeed in this course:

- MATH 1680 Online Helpdesk (Schedule will be posted on Canvas.)
- Navigate's Study Buddy (https://navigate.unt.edu)
    - Study with a classmate.
- Math Lab (https://math.unt.edu/mathlab)
    - Get help with homework assignments in a quiet environment.
- UNT Learning Center (https://learningcenter.unt.edu/)

- Supplemental Instruction (https://learningcenter.unt.edu/math-1680-schedule)
  - Peer-led group study sessions.
- Tutoring (https://learningcenter.unt.edu/tutoring)
  - Request free one-on-one tutoring.

ADA Accommodation Statement

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website (https://studentaffairs.unt.edu/office-disability-access). You may also contact ODA by phone at (940) 565-4323.

Creating an Inclusive Learning Environment

I value the many perspectives students bring to our campus. Please work with me to create a classroom culture of open communication, mutual respect, and belonging. All discussions should be respectful and civil. Although disagreements and debates are encouraged, personal attacks are unacceptable. Together, we can ensure a safe and welcoming classroom for all. If you ever feel like this is not the case, please let me know. We are all learning together.

Course Schedule

Date		**Lab**
8/18/2025	Mon	Lab 1-Census & Helicopter Experiment
8/25/2025	Mon	Lab 2-Designing a Statistical Study
9/1/2025	Mon	Labor Day
9/8/2025	Mon	Lab 3-Graphic Displays of Data
9/15/2025	Mon	Lab 4-Measures of Center and Position
9/22/2025	Mon	Lab 5-Measures of Dispersion
9/29/2025	Mon	Lab 6-Correlation and Regression
10/6/2025	Mon	Lab 7-Probability
10/13/2025	Mon	Lab 8-Contingency Tables
10/20/2025	Mon	Lab 9-Discrete Random Variables

10/27/2025	Mon	Lab 10-Binomial Distribution
11/3/2025	Mon	Lab 11-Normal Distribution
11/10/2025	Mon	Lab 12-Sampling Distributions
11/17/2025	Mon	Lab 13-Confidence Intervals
11/24/2025	Mon	Thanksgiving Break
12/1/2025	Mon	Final Review

The above schedule is subject to change. Students will be notified by Eagle Alert if there is a campus closing that will impact a class.

Assessing Your Work

The lab projects will count towards 13% of your final grade in MATH 1680.230.

Academic Integrity Standards and Consequences

According to UNT Policy 06.003, Student Academic Integrity (https://policy.unt.edu/policy/06-003), academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Attendance and Participation

Students are expected to complete the lab projects in person during each lab session. If are unable to complete a lab project during class, you may request an extension in person from the lab instructor. If you miss a lab for reasons beyond your control, contact both your lecture instructor and lab instructor to request accommodations. You may also provide documentation verifying the reason for your absence to the Dean of Students (https://studentaffairs.unt.edu/dean-of-students).

Recordings

This is a face-to-face class, not an online class. Nevertheless, I may record some of my lectures via Zoom for students who are unable to attend class. I reserve the right to restrict access to such recordings to students who have a valid and documented reason for missing class.

Syllabus Change Policy

Any changes to the syllabus will be announced in class and/or posted on Canvas.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to the UNT Learning Management System (LMS) for contingency plans for covering course materials.