

Stern School of Business
New York University

Course: Stat UB.103- 004 Statistics for Business Control and Regression and Forecasting

Semester: Fall 2025 (9/3/2025 – 12/11/2025)

Class Hours: M W 2:00 PM – 3:15 PM **Classroom:** Tisch LC25

Required Recitation: TBA Zoom meeting

Instructor: Arde Shahmaei **Email:** ashahmae@stern.nyu.edu

Office Hours: M, W 1:00 PM- 2:00 PM **Location:** KMC 8-171

Teaching Fellow: Aashi Mehta **Email:** apm7971@nyu.edu

Office hour: TBA **Location:** Zoom meeting

Course Objective

The objective of this course is to introduce students to basic statistical techniques which are widely used in business and related fields. The topics include data exploration and presentation, probability and randomness, random variables, and statistical inference. In addition, considerable time will be devoted to simple and multiple linear regression analysis.

Texts and Other Class Materials

All the course materials (PowerPoints, Assignments, Data files, Statistical tables, etc..) will be posted on course Brightspace.

Minitab, 22nd edition, which is a computer program for statistical analysis. The *Minitab*, 22nd edition is available through the Citrix system at the Stern website. Instructions are available on course NYU LSM (Brightspace).

The required book for this course, Statistics for Business & Economics by McClave, will be delivered to you digitally. You will receive an email from "BryteWave" with the instructions for accessing the material. The cost of the book is \$48.25, which will be added as a "book charge" to your bursar bill.

If you don't receive an email go to <https://brytewave.redshelf.com/accounts/forgot/> and reset your password using your NYU net ID email address.

If you choose to find your course materials elsewhere, you must login here to the student portal and opt out of the program by September 17th. If you do not opt out by this date, you will be charged.

Course work will involve many instances of simple calculations, and for these a hand-held calculator will be helpful. The only calculator features needed for this course are the four basic functions (+ - × ÷), along with memory and square roots.

Exponential and logarithm features are useful. It is not necessary (or even desirable) to have a calculator with statistical functions such as standard deviation or regression.

Course topics and Reading Assignments:

Topics	Reading Assignments from the book
1. Introduction	Chapter 1, Omit 1.4
2. Graphical descriptions such as stem-and-leaf displays, histograms, and bivariate plots; mean, median, mode, standard deviation	Chapter 2
3. Basic concepts of probability	Chapter 3
4. Discrete Random Variables, Binomial and Poisson Distributions	Chapter 4 4.1- 4.4
5. Continuous Random Variables, Normal Distribution	Chapter 4 4.5 – 4.7
6. Sampling distributions, Sampling distribution of the sample mean, the Central Limit theorem	Chapter 5
7. The confidence interval methodology for a single sample	Chapter 6 6.1 -6.4
8. Determining the Sample Size	Chapter 6 6.5
9. The hypothesis testing for population mean	Chapter 7 7.1– 7.5
10. The hypothesis testing for population proportion	Chapter 7 7.6
11. Comparing two population means	Chapter 8
12. Simple Linear Regression	Chapter 11
13. Multiple Linear Regression	Chapter 12 12.1 -12.9, 12.11 -12.12

Grading Information

There will be two exams, a final exam, and homework assignments. The specific numeric computation and dates of examinations are:

Exam 1	25%	Date: Wednesday 10/8/2025
Exam 2	25%	Date: Wednesday 11/11/2025
Final Exam	30%	Date: Monday 12/15/2025 at 4:00-5:50 PM
Homework	<u>20%</u>	
Total	100%	

No class on:

Fall Legislative Day Monday, October 13 we meet on Tuesday, October 14

Wednesday, November 26 through Sunday, November 30(Thanksgiving Break)

ACADEMIC INTEGRITY

Our undergraduate [Academics Pillar](#) states that ***we take pride in our well-rounded education and approach our academics with honesty and integrity.*** Indeed, integrity is critical to all that we do here at NYU Stern. As members of our community, all students agree to abide by the [NYU Academic Integrity Policies](#) as well as the NYU Stern Student Code of Conduct, which includes a commitment to:

- Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.
- Clearly acknowledge the work and efforts of others when submitting written work as one's own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.
- Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

STERN CODE OF CONDUCT

The Stern Code of Conduct and Judiciary Process applies to all students enrolled in Stern courses.

For undergraduates, information can be found here:

<https://www.stern.nyu.edu/portalpartners/current-students/undergraduate/community/community-expectations>

To help ensure the integrity of our learning community, prose assignments you submit to NYU Brightspace will be submitted to Turnitin. Turnitin will compare your submission to a database of prior submissions to Turnitin, current and archived Web pages, periodicals, journals, and publications. Additionally, your document will become part of the Turnitin database.

GENERAL CONDUCT & BEHAVIOR

Students are also expected to maintain and abide by the highest standards of professional conduct and behavior. Please familiarize yourself with Stern's Policy in Regard to In-Class Behavior & Expectations for Graduate and Undergraduate students.

(<https://www.stern.nyu.edu/portal-partners/registrar/policies-procedures/generalpolicies/code-conduct>)

(<http://www.stern.nyu.edu/portal-partners/current-students/undergraduate/resourcespolicies/academic-policies/index.htm>) and the NYU Student Conduct Policy

(<https://www.nyu.edu/about/policies-guidelines-compliance/policies-andguidelines/university-student-conduct-policy.html>)

UNDERGRADUATE GRADING GUIDELINES

Grading Information for Stern **Core Courses**

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have adopted a grading guideline for core courses with enrollments of more than 25 students in which approximately 35% of students will receive an “A” or “A-” grade. In core classes of less than 25 students, the instructor is at liberty to give whatever grades they think the students deserve, while maintaining rigorous academic standards.

STUDENT ACCESSIBILITY

If you will require academic accommodation of any kind during this course, you must notify me at the beginning of the course and provide a letter from the Moses Center for Student Accessibility (212-998-4980, mosescsa@nyu.edu) verifying your registration and outlining the accommodations they recommend. If you will need to take an exam at the Moses Center for Student Accessibility, you must submit a completed Exam Accommodations Form to them at least one week prior to the scheduled exam time to be guaranteed accommodation. For more information, visit the CSA website: <https://www.nyu.edu/students/communities-andgroups/student-accessibility.html>

STUDENT WELLNESS

Our aim is for students to be as successful academically as they can, and to help them overcome any impediments to that. Bookmark the NYU Stern Well-being Resource Hub (<https://www.stern.nyu.edu/wellbeing>) for existing services at NYU and Stern covering a wide variety of topics including financial well-being, relationship well-being, mental well-being, and more. Any student who may be struggling and believes this may affect their performance in this course is urged to contact the Moses Center for Student Accessibility (see also the Student Accessibility section of this syllabus) at 212-998-4980 to discuss academic accommodations. If mental health assistance is needed, call the NYU’s 24/7 Wellness Exchange hotline 212-443-9999. Furthermore, please approach me if you feel comfortable doing so. This will enable me to provide relevant resources or referrals. There are also drop-in hours and appointments. Find out more at <http://www.nyu.edu/students/health-and-wellness/counseling-services.html>

NAME PRONUNCIATION AND PRONOUNS

NYU Stern students now have the ability to include their pronouns and name pronunciation in Albert. I encourage you to share your name pronunciation and preferred pronouns this way.

Please utilize this link for additional information: [Pronouns & Name Pronunciation](#)

RELIGIOUS OBSERVANCES AND OTHER ABSENCES (OPTION 1)

NYU’s [Calendar Policy on Religious Holidays](#) states that members of any religious group may, without penalty, absent themselves from classes when required in compliance with their religious obligations. You must notify me in advance of religious holidays or observances that might coincide with exams, assignments, or class times to schedule mutually acceptable alternatives. Students may also contact religiousaccommodations@nyu.edu for assistance.

NYU Stern is committed to ensuring an equitable educational experience for all students regardless of identity or circumstances and strives to recognize the obligations its

students have outside of Stern. Please review all class dates at the start of the semester and review all course requirements to identify any foreseeable conflicts with exams, course assignments, projects, or other items required for participation and attendance. If you are aware of a potential conflict, please contact me as soon as possible to discuss any potential conflicts to determine whether/how they can be accommodated.

LAPTOPS, CELL PHONES & OTHER ELECTRONIC DEVICES

The use of tablets and electronic devices that are laid flat on the desk, for the purpose of note-taking only, is permitted (during the class not during the exams). However, students should make every effort to avoid distracting their classmates or disrupting the class, including arriving early and choosing a seat that is less distracting for peers.

Attendance

A student's presence and participation in class are critical factors towards the completion of the requirements for the class and the achievement of success in the course.

You are expected to attend all scheduled classes including the required online Recitation sessions.

Students who are unable to attend an on-line meeting must contact the Teaching Fellow in advance (or as soon as possible in an emergency) and view the class recording. The Recitation Zoom meetings' schedule and the class recordings will be available on your course Brightspace.

Late Submission of Assignments

Late assignments will either not be accepted or will incur a grade penalty unless due to documented serious illness or family emergency. The instructor will make exceptions to this policy for reasons of religious observance or civic obligation, only when the assignment cannot reasonably be completed prior to the due date and the student has made arrangements for late submission with the instructor in advance.

Collaboration on Graded Assignments

Students may not work together on graded assignments unless the instructor gives express permission. (NYU Stern Code of Conduct)

Recording Classes

At any time, your classes may be recorded for educational purposes.

Make-up Policy

Make-up exams are only given in the case of documented serious illness, family emergency, religious observance, or civic obligation.

In emergency cases you may e-mail your assignment to TF prior to the due time and date.