

Business Statistics

Course Description, Requirements & Syllabus

Professor:
Office:
Telephone:
Office hours:
Email:

COURSE DESCRIPTION

This course provides students with the statistical tools and concepts needed in business applications. Topics include: proper tabular and chart presentation; interpretation of descriptive measures; applications of probability and the normal distribution; confidence interval estimation; hypothesis testing; and simple linear regression models. Emphasis is on understanding data analysis and interpretation. Computations are facilitated using standard spreadsheet software, a valuable tool for the students. Discussions on ethical issues are integrated throughout the course. This course will enhance skills in critical thinking, as well as oral and written communication. Techniques learned in this course can be immediately put to use by the student.

COURSE OBJECTIVES

- To provide the student with a fundamental background in both descriptive and inferential statistical methods that are useful in all areas of their business studies.
- To make the student proficient in the use of the EXCEL software.
- To enhance the student's skills in critical thinking.

COURSE MATERIALS

TEXT: Business Statistics: A First Course, 8th edition
David M. Levine, David F. Stephan, Kathryn A. Szabat

COURSE REQUIREMENTS

- homework assignments online (you will need the course code above to register for the HWs)
- Two midterm exams and a final exam.

GRADING POLICY

Midterms	25% each
Final	35%
Homework	15%

Make-up will not be allowed, and a missed exam or homework will automatically result in a zero. I will drop the lowest homework score.

HOMEWORK ASSIGNMENTS

1. All homework assignments will be provided via Pearson MyStatLab.
2. If you are not enrolled in MyStatLab by 2/14/2024, you will receive WA grades.

FINAL EXAMS

1. The final exam will be administered online.
2. The final exam is cumulative.
3. You are required to install the Pearson Lockdown Browser on your computers. The browser can be downloaded and installed from:
https://media.pearsoncmg.com/cmg/pmmg_mml_shared/mxlplayer_update/mxlplayer_update.html
4. To help you to get familiar with the system, a pilot exam will be provided.
5. It is your responsibility to prepare your own computer and ensure a reliable wireless internet connection during the exam.

STUDENTS WITH DISABILITIES

Baruch has a continuing commitment to providing reasonable accommodation for students with disabilities. Students with disabilities who may need some accommodation to fully participate in this class should contact Student Disability Services as soon as possible at disability.services@baruch.cuny.edu or call 646-312-4590. Students who need accommodation should contact the instructor as soon as possible.

ACADEMIC INTEGRITY

Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the college's educational mission and the students' personal and intellectual growth. Baruch students are expected to bear individual responsibility for their work and to uphold the ideal of academic integrity. Any student who attempts to compromise or devalue the academic process will be sanctioned. Please see the Baruch College Website for Further Information: http://www.baruch.cuny.edu/academic/academic_honesty.html

BBA Learning Goals

- Analytical skills: Students will possess the analytical and critical thinking skills to evaluate issues faced in business and professional careers.
- Technological skills: Students will possess the necessary technological skills to analyze problems, develop solutions and convey information.

- Communication Skills: Oral: Students will have the necessary oral communication skills to convey ideas and information effectively and persuasively.
- Communication Skills: Written: Students will have the necessary written communication skills to convey ideas and information effectively and persuasively.
- Civic Awareness and Ethical Decision-Making: Students will have the knowledge base and analytical skills to guide them when faced with ethical dilemmas in business. Students will have an awareness of political, civic and public policy issues affecting business.

RELIGIOUS ACCOMMODATIONS

REQUESTS FOR ACCOMMODATIONS

1. Students requesting a religious accommodation should contact the Office for Student Affairs at the College or unit in which they are enrolled. The Chief Student Affairs Officer, or a designee, and the student will engage in an interactive process with the goal of finding an acceptable accommodation.
2. Consistent with New York State Education Law § 224-a, students who are absent from school because of a religious belief will be given the equivalent opportunity, without any additional fee charged, to register for classes or make up any examination, study or work requirements missed because of such absence on any particular day or days.
3. Employees and applicants requesting a religious accommodation should contact the Office of Human Resources at the College or unit where they are employed or applying. The Director of Human Resources, or a designee, and the employee/applicant will engage in an interactive process with the goal of finding an acceptable accommodation. Classified civil service candidates who are required to take an exam or attend a hiring pool and are seeking an accommodation should follow the written instructions provided on the exam application, hiring pool instructions, or contact the HR Advisory Services unit in the Office of Human Resources Management in the Central Office.
4. Individuals requesting accommodations may be required to submit an intake form. In the case of requests for religious accommodations, the interactive process may include a consideration of a variety of factors, such as the individual's religious practices and the functions and requirements of the academic program or job. Reasonable accommodations may include, but are not limited to, flexible arrival and/or departure times, permission to make up a test or lecture, leave or assignment changes, time and/or space to pray, or an accommodation relating to appearance or dress.
5. CUNY generally will not question that a request for religious accommodation is based on a sincerely held belief. However, if CUNY has genuine reason to doubt that a belief qualifies as religious, or is sincerely held, CUNY may make a limited inquiry, asking for supporting documentation. The documentation submitted may include the requestor's first-hand explanation, or explanations from others, such

as a religious official or clergy member, who are aware of the religious practice or belief.

6. A grant or denial of the request must be made in as soon as practicable, taking into account the urgency of the request, and sent in writing to the individual making the request, either stating the accommodation, or for denials, the reason(s) the request was denied.

APPEALS

Students, employees, and applicants may appeal a denial of their accommodation request by filing a complaint with the Chief Diversity Officer at their College or unit. The Chief Diversity Officer, or a designee, will mediate to try to resolve the issues between the individual and the College to find an acceptable accommodation. If a mutually acceptable accommodation cannot be determined, then the Chief Diversity Officer, or a designee, will investigate the complaint and make a recommendation to the College President, or if the employee works at the Central Office, then to the Vice Chancellor for Human Resources Management. The College President or Vice Chancellor for Human Resources Management will make the final determination concerning the complaint. If the employee is covered by a collective bargaining agreement, the employee may discuss the matter with a union representative and exercise any rights available under such agreement.

ACADEMIC SUPPORT

Visiting Baruch's academic support services is correlated with higher grades. I encourage all students in this course to take advantage of these services: visit the tutors at SACC, work with the consultants at the Writing Center and Tools for Clear Speech and take advantage of office hours! Visit early and often!

Early in the semester, I will receive a survey that asks me to identify students who might be struggling in class. Those I name will be prompted by an email or text to visit one of our support services. Please respond to those invitations to meet with a tutor or consultant. Students who visit these services do better in their classes than students who do not.

There's no need to wait for an alert message to get help—you can start working with tutors from the start of the semester. Want more information? Try these links:

- SACC (Student Academic Consulting Center): SACC supports the academic success of undergraduates at Baruch College through small group peer tutoring and other programs, serving students in a wide variety of subjects across the curriculum. <https://sacc.baruch.cuny.edu/>
- Writing Center: The Writing Center offers free support to all Baruch students. Our professional consultants work collaboratively with you to deepen your writing and English language skills. <https://blogs.baruch.cuny.edu/writingcenter/>
- Tools for Clear Speech: TfCS offers a broad range of free tutorial sessions, workshops, and online practice to enhance the oral communication skills of Baruch's non-native English-speakers, multilinguals, and English language learners. <https://tfcs.baruch.cuny.edu/>

BBA Learning Goals

ASSURANCE OF LEARNING

BBA Learning Goals	Significant Part of Course	Moderate Part of Course	Minimal Part of Course	Not Part of Course
Analytical skills	o			
Technological skills	o			
Oral communication skills		o		
Written communication skills		o		
Civic awareness and ethical decision-making		o		
Global awareness				o

SYLLABUS

Dates and Times for the Coverage of Each Topic can be found in the Course Calendar on the Course Blackboard Website

- Topic I**
(1 Week) **Introduction and Data Presentation**
Read Chapters 1 & 2 Sections 1-5 & 8; Chapters 1 & 2 Excel Guides
- Introduction to Statistics
 - Data and Variables
 - Contingency Tables
 - Bar and Pie charts
 - Frequency and Percentage distributions
 - Histograms and Polygons
 - Cumulative Distributions
- Topic II**
(1.5 Weeks) **Data Characteristics and Summary Measures**
Read Chapter 3, Sections 1-4 (omit Chebychev Rule) & 6; Chapter 3 Excel Guide
- Measures of Central Tendency
 - Measures of Variability
 - Shape and symmetry
- TOPIC III**
(1.5 Weeks) **Regression and Correlation**
Read Chapter 12, Sections 1-3; Chapter 12 Excel Guide
- Simple Linear Regression
 - Measures of variation
- TOPIC IV**
(3 Weeks) **Probability, Probability Distributions, & Sampling Distributions**
Read Chapter 4, Sections 1 & 2; Chapter 5, 5.1 Chapter 6, Sections 1 & 2; Chapter 7; Chapters 4-7 Excel Guide
- Rules of probability
 - Conditional Probability & Independence

- Discrete probability distributions
- Continuous probability distributions
- Normal distribution
- Sampling distributions of means & proportions

TOPIC V:
(2 Weeks)

Estimation

Read Chapter 8; Chapter 8 Excel Guide

- Confidence intervals for means and proportion
- Sample size determination for means and proportions

TOPIC VI:
(3 Weeks)

Hypothesis Testing Part I

Read Chapter 9; Chapters 9 Excel Guide

- Basic Concepts
- One Sample tests for means and proportions

TOPIC VII:
(1.5 Weeks)

Hypothesis Testing Part II

Chapter 10, Sections 1-3 (testing only); Chapter 11;
Chapters 10-11 Excel Guides

- Two Sample tests for means and proportions
- Testing difference between 2 or more proportions