

BUS/ECON 309 Quantitative Foundations for Business, Fall 2024

Class Time: Wednesdays; 9:00 am to 11:45 am; Del Norte 2545

Instructor: JM Abesa, MBA

Office Hours: Wednesdays, 12:00 pm to 1:30 pm

Email: (CSUCI email) **Phone:** 818-726-7505

1. Course Description and Prerequisites

This course reinforces and synthesizes quantitative skills developed in the lower division to ensure high levels of competence. Students polish and apply these skills to examples from core business disciplines both from previous lower division classes as well as upcoming major requirements.

Prerequisite: ACC 230, ECO 210, and one of the following, MAT 105, MAT 131, MAT 153, MAT 171, MAT 191, or MAT 193

2. Required Course Material

The textbook for this course is [Introductory Business Statistics](#). This book is an open educational resource (OER) and is available for free PDF download or can be read online. Each course module will specify the chapters in the book that you will need to read and study.

The review on Algebra and Basic Calculus concepts will consist of a combination of lectures, videos, and exercises. There will be a diagnostic test for these concepts on the first class day to determine the baseline for the review topics.

3. Online Instructional Resources

We will also be using Canvas for announcements, assignments, and additional course resources. Grades, exam results and other information will be posted online through Canvas.

4. Student Learning Outcomes

By the end of the course, you should be able to:

- Use algebra to solve challenges in abstract and applied settings
- Use derivatives to find local/global maxima and minima in abstract and applied settings
- Create accurate and compelling graphs and tables for business applications
- Interpret graphs and tables in business applications
- Analyze information using calculators and software applications

5. Grading

Your final grade for the course will be determined based on the following:

- Quizzes: 15%
- Assignments: 15%
- Case Study Presentations: 20%
- Midterm Exam: 25%
- Final Exam: 25%

The grading scale below will be used:

- A = 93-100%
- A- = 90% to 92.99%
- B+ = 87% to 89.99%
- B = 83% to 86.99%
- C+ = 77% to 79.99%
- C=73% to 76.99%
- C- = 70% to 72.99%
- D = 60 to 66.99%
- F = Below 60%

Please be prepared to start each session with a quiz about the topics discussed the previous session. Please also expect to be given an assignment at the end of every session. These assignments will be found and submitted on Canvas.

Late Submissions

Late submissions (via Canvas) of assignments will be accepted up to 24 hours after the deadline (deadlines will be 11:59 pm PST of each due date). Such late submissions will be graded according to the specific assignment or discussion's rubric that covers late submission.

Failure to submit after the extension period, without making prior arrangements with me, will result in a ZERO for that assignment. If you anticipate not being able to submit an assignment, do let me know as soon as possible.

Absences

Please be physically present all class sessions. Absences, and tardiness, from in-person sessions and during quizzes, case study presentations, midterm exam, and/or final exam will be treated according to CSUCI policies.

In the event of absence from the midterm exam due to an emergency, the grade weight of the midterm exam will be added to that of the final exam. In the event of absence from the final exam, proper documentation (the type of which will depend on the emergency) must be provided in order to be given a makeup final exam. Failure to provide appropriate documentation will result in a zero score for the final exam.

If your final exam score is higher than your midterm exam score, your midterm exam score will be revised to the score you got in the final exam.

6. Course Expectations and Policies

Expectations regarding the learning environment: Please be reminded that learning is a collaborative process. We must abide by specific civil behavior and cultivate attitudes that exhibit mutual respect.

Course expectations: You are expected to read the assigned material, submit assignments on time, and prepare for the case studies. The university standard for course workload is three hours of outside work for every hour in class, i.e., a three-unit course requires nine hours of work each week.

7. Minimum Computer Specifications and Expectations

Please always: 1) use the university email system; 2) check Canvas regularly for announcements and any uploaded class materials – it will also be used to submit your assignments; 3) use a word processing program for writing assignments (e.g., Microsoft Word); 4) have access to Microsoft Excel; 5) be able to access assigned websites through the internet; 6) use the library databases to find peer-reviewed journal literature; and 7) be able to paraphrase concepts without plagiarizing.

To ensure the proper use of Canvas, please make sure you have at the minimum, the following specifications on your personal computers:

Software Requirements:

- Windows 10
- Microsoft Office 2016 suite or higher
- Up-to-date anti-virus software (Microsoft Security Essentials)
- Adobe Acrobat Reader

Supported Browsers

- Windows (Chrome, Firefox, Internet Explorer), MAC (Safari)

Hardware Requirements:

- A Pentium 2 GHz processor or faster, 4-8 GB of RAM
- DSL or faster speed preferred
- Sound card & speakers

8. Title IX and Inclusion

Title IX & Inclusion manages the University's equal opportunity compliance, including the areas of affirmative action and Title IX. Title IX & Inclusion also oversees the campus' response to the University's nondiscrimination policies. CSUCI prohibits discrimination and harassment of any kind on the basis of a protected status (i.e., age, disability, gender, genetic information, gender identity, gender expression, marital status, medical condition, nationality, race or ethnicity, religion or religious creed, sexual orientation, and Veteran or Military Status). This prohibition on harassment includes sexual harassment, as well as sexual misconduct, dating and domestic violence, and stalking. For more information regarding CSUCI's commitment to diversity and inclusion or to report a potential violation, please contact Title IX & Inclusion at 805.437.2077 or visit the Title IX website.

9. Academic Honesty

Academic integrity is the responsibility of all members of the CSUCI community. As members of the university community, we share equally in the responsibility to ensure that the honor code instills self-respect, fosters scholarship and achievement, builds habits of honesty, promotes ethical behavior, inspires mutual fellowship and respect, and confers prestige on CSUCI and members of the university community. We should be familiar with the Honor code. Students share with faculty and staff the responsibility of sustaining a climate of integrity. These values are to be maintained at all times.

Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, and facilitating academic dishonesty. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Please report any violations you witness to the instructor.

10. Students with Special Needs

If you are a student with a disability requesting reasonable accommodations in this course, please visit Disability Accommodations and Support Services (DASS) located on the second floor of Arroyo Hall, or call 805-437-3331. All requests for reasonable accommodations require registration with DASS in advance of need. You can apply for [DASS services online](#). We will work together regarding classroom accommodations.

11. Resources and Support

- Writing and Multiliteracy Center (WMC): WMC provides all CI students with FREE support services and programs that help them become more effective writers and communicators. Peer tutors help students on a range of assignments at any stage of the composition process in all disciplines. Students visit the WMC with assignments such as expository essays, literature review, lab reports, marketing reports, legislative testimonials, oral presentations, research posters, short video projects, and many more. Students are also welcome to bring in other types of non-academic work such as resumes, letters of application, and personal statements for graduate school applications. Make an appointment, or drop by our Virtual WMC to ask questions or see if a tutor is available. To learn more or see our additional resources for writers and presenters, visit WMC. You can also email them at wmc.tutors@csuci.edu.
- Counseling and Psychological Services (CAPS): CAPS is pleased to provide a wide range of services to

assist students in achieving their academic and personal goals. Services include confidential short-term counseling, crisis intervention, psychiatric consultation, and 24/7 phone and text support. CAPS is located in Bell Tower East, 1867 and can be reached at 805-437-2088 (select option 2 on voicemail for 24/7 crisis support; or text “Hello” to 741741); you can also email at caps@csuci.edu or visit the CAPS website.

- **Basic Needs Program (BNP):** If you face challenges securing food, housing, or other basic needs, you are not alone, and CSUCI wants to help during this time of crisis. One helpful resource is the community of staff available through the Basic Needs Program (BNP) located on the first floor of Arroyo Hall, Room 114. Students can call 805-437-2067, email basicneeds@csuci.edu, or drop in during open hours and talk with a BNP student assistant or professional staff member for resources, ideas, and strategies connected to basic needs challenges. Students can complete a referral form to request services for themselves or others by going to www.csuci.edu/basicneeds. The BNP is known for the Dolphin Pantry located at Arroyo Hall 114, but there are other resources available and staff who can help you work through housing insecurity or displacement as well as financial insecurity. Undergraduate students living in California are especially encouraged to explore CalFresh (grocery money each month for eligible students) as a resource. Domestic undergraduate students living in California are likely to be eligible for CalFresh and BNP staff are skilled with helping students navigate this process.

12. Schedule

<u>Unit/Module</u>	<u>Topic</u>	<u>Book chapter</u>	<u>Estimated Dates</u>
	Orientation and Introductions		8/28/24
I	Sampling and Data	1	8/28/24
	Algebra and Basic Calculus diagnostic test		last hour of 8/28/24
	Algebra and Basic Calculus Concepts		9/4/2024 (online) and 9/11/24
II.	Descriptive Statistics	2	9/18/24
III.	Probabilities	3	9/18/2024 and 9/25/24
IV.	Discrete Random Variables	4	9/25/24
V.	Continuous Random Variables	5	10/2/24
VI.	Normal Distribution	6	10/9/24
	MIDTERM EXAM		10/16/24
VII.	Central Limit Theorem	7	10/16/24
VIII.	Confidence Intervals	8	10/23/24
IX.	Hypothesis Testing 1	9	10/30/24
X.	Hypothesis Testing 2	10	11/6/24
XI.	Chi-Square Distribution	11	11/13/24
XII.	F Distribution and ANOVA	12	11/20/24
XIII.	Linear Regression and Correlation	13	11/27/2024 and 12/4/24
	FINAL EXAM		12/11/24

Please note that information contained in this syllabus, other than that mandated by the University, may be subject to change without advance notice as deemed appropriate by the instructor.