

**BUSEC 309
Quantitative Foundations for Business
Section 2612-03
Fall 2023****INSTRUCTOR INFORMATION**

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TIME/PLACE

Term Dates: August 23, 2023 – December 14, 2023
Weekly Class Meeting: Wednesdays 9 – 11:50 A.M.
Classroom: Online Synchronous
Office: MVS Hall 2175
Office Hours: Wednesdays 12 to 1 PM, held via zoom
and by Appointment

Course Description:

The main objective of this class is to bring students up to speed with the quantitative skills expected of individuals graduating with a business degree. This course aims to ensure that students are well-equipped to handle the quantitative aspects of their future careers in the business field by focusing on algebra, "light" calculus, introductory statistics, data visualization, and the creation and interpretation of tables and graphs.

Throughout the course, you will work on practical examples drawn from various areas of business, which will help you see the real-world applications of the quantitative methods. By the end of the course, you should feel comfortable using these quantitative tools to solve business-related problems and be well-prepared for the quantitative demands of their future careers in the business field.

Course Learning Outcomes: Upon completion of this course, you will be able to

1. Use algebra to solve challenges in abstract and applied settings.
2. Use derivatives to find local/global maxima and minima in abstract and applied settings.
3. Interpret graphs and tables in business applications.
4. Create accurate and compelling graphs and tables for business applications.
5. Analyze information using personal calculations as well as software applications

Textbook and online platform:

No textbook is required for this course, though I may occasionally post some recommended readings to the course webpage.

Equipment:

You are required to have access to Internet and a computer. The computer should have adequate software including Microsoft Word or similar word processing software, the capability of printing to PDF (or scanning handwritten work), and a web browser of your choice (I usually use Firefox or Chrome).

Online Examinations

There will be two mid-term exams given on **Monday September 20th and October 25th**. The final exam will be given at the scheduled time (**December 6th**). The Final Exam will not be comprehensive. Mid-term and final exams contain multiple choice questions and short answer problems. I will post additional instructions for all exams a week before the exams. Exams and the whole class may be curved, at my discretion. This will be done in order to adjust for difficulty of the class.

Project with Graphing Portfolio

The goal of this assignment is that you can use an economic topic (news) and create a graph that clearly uses data to tell a compelling story and/or answer some question. More details are provided in a separate handout and on the Canvas.

GRADING

20%

20%

40%

20%

SEMESTER GRADE DETERMINATION

Homework and Class Assignments

Project with Graphing Portfolio

Two Mid-term Exams

Final Exam

Letter grades for this class will be determined based on the total points in all assignments/final exam as follows:

Percentage	Letter grade	Percentage	Letter grade
95 – 100%	A	73 – 76.9	C
90 – 94.9	A-	70 – 72.9	C-
87 – 89.9	B+	67 – 69.9	D+
83 – 86.9	B	63 – 66.9	D
80 – 82.9	B-	60 – 62.9	D-
77 – 79.9	C+	<60	F

Incompletes and Late Withdrawal

Incomplete grades will only be awarded under extraordinary circumstances. Not doing well in the course does not constitute an extraordinary circumstance. To avoid being assigned failing grades, students who decide not to complete the class must withdraw themselves from the class

in accordance with the procedures described in the University catalog.

Drop Policy

According to University policy, non-attendance does not constitute withdrawal; to withdraw from this class you must file a drop form with the University. If you fail to attend this class, and you do not formally drop the class, a "WU" (unauthorized withdrawal), the equivalent of a failing grade, will be recorded.

Academic Dishonesty

University rules prohibit cheating, fabrication, facilitating the academic dishonesty of another student, and plagiarism. In accordance with the CSU Channel Islands policy on academic dishonesty, students in this course who submit the work of others as their own (plagiarize), cheat on tests and examinations, help other students cheat or plagiarize, or commit other acts of academic dishonesty will receive appropriate academic penalties, up to and including failing the course.

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); you can also email us at caps@csuci.edu or visit our website.

Emergency Intervention and Basic Needs

If you or someone you know is experiencing unforeseen or catastrophic financial issues, skipping meals, or experiencing homelessness/housing insecurity (e.g., sleeping in a car, couch surfing, staying with friends), please know that you are not alone. There are resources on campus that may assist you during this time. The Dolphin Pantry is currently located in Arroyo Hall and offers free food, toiletries, and basic necessities for current CI students. For additional assistance, please contact the Dean of Students Office at (805) 437-8512 or visit Bell Tower 2565. Please visit the website for the most up to date information on the [Basic Needs Program](#).

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

Class Disruption Plan

A disruption means you, me, or all of us cannot participate in 'class as usual' for a reason we could not predict at the beginning of the semester. After COVID-19, we are well aware that disruption can happen fast. While we hope to avoid any closures due to COVID related reasons, let's face it, disruption happens every semester. You may get sick, I may get sick, or campus may close due to a wildfire. Our goal as a learning community is to do our best to keep teaching and learning with as little interruption as possible. The following sections explain what you can expect from me and what I expect from you when facing disruption - small or big!

If I am 'out'

If I get ill, or need to care for a loved one, or some other unexpected interruption, I may not be able to be present or interactive in the course. If that were to happen (and let's hope it doesn't), you need to follow the Canvas instruction where I will place lectures, and PowerPoint slides, assignments, and exams.

If you are 'out'

If you are out for the same above reasons, you need to let me know and we can communicate via email. You will need to follow the Canvas instructions and modules for your assignments. take a few hours or days.

Online Course Netiquette Guidelines¹

You should **check the course web site and your CI mail regularly** for announcements and updates while the class is in session. Respond to instructor and classmates' inquiries in 48 hours or sooner. We do not have required postings, but if you use the discussion board, please follow these rules:

1. Review all discussion postings before posting your own to prevent redundancy.
2. Be aware that typing in all capital letters indicates shouting.
3. Be careful with humor and sarcasm. Both can easily be misunderstood!
4. Check your writing for errors by reviewing what you've written before submitting it.
5. Acronyms (LOL, etc.) and emoticons are commonly used online, but be careful not to overuse them.
6. Many communications with your instructor or fellow students are best handled through email. Only post on the classroom discussion board if the conversation is relevant to others in the class.
7. Respect the privacy of your classmates and what they share in class.
8. Ask classmates for clarification if you find a discussion posting offensive or difficult to understand.

Understand that we may disagree and that exposure to other people's opinions is part of the learning experience

¹ Adapted from <http://blogs.lsc.edu/expectations/netiquette-guidelines/>

Tentative schedule

Below is the tentative schedule for this course.

Week	Wednesday	<u>Chapters to be Covered,</u> <u>Exam Dates</u>
1	08/23	Intro; Numeracy refresher, Assignment
2	08/30	Equations w/one unknown, Assignment
3	09/6	Two Equations with Two unknown, Assignment
4	09/13	Derivatives, Maxima and Minima, Assignment, Exam I Review
5	09/20	Exam I , Interpreting graphs
6	09/27	Interpreting graphs, Project data set Assignment
7	10/4	Interpreting tables, Assignment
8	10/11	Creating effective graphs, Assignment for project: draft tables and graphs
9	10/18	Descriptive Statistics Refresher, Assignment
10	10/25	Exam II , Regression Analysis
11	11/01	Regression, hypothesis testing in regression, Assignment
12	11/08	Univariate regression using OLS (slope and intercept parameter estimates, OLS assumptions (
13	11/15	T-tests, p-values, confidence intervals), Assignment
14	11/22	Measures of model fit and precision, and model adjustments, Assignment
15	11/29	Project Review
16	12/06	Final Exam

Please note that the above schedule is subject to change by the instructor due to time constraints. I highly recommend that students join every week's synchronous zoom class. There will be a certain amount of overlaps between textbooks and lectures notes and I will emphasize and recap the parts that I think are most important and these are most likely to show up in the exams. Sometimes, I will discuss the problem sets and give you hints on some questions. In addition, I strongly suggest that you complete problem sets on your own before reading the solutions. Since it will always be helpful if you try to think about and write down your own answers and compare these with the correct solutions. The exams problems are similar to the problems that you have solved before. The textbooks and course materials complement each other. Due to our limited class time, we are not able to cover everything useful, so this makes textbooks is a good resource with which you can verify understandings of lectures.