

BUS/ECON 309: QUANTITATIVE FOUNDATIONS FOR BUSINESS

FALL 2022

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Course Information: Mondays & Wednesdays 12:00pm-1:15pm, Del Norte 1535

Textbook: I do not have a textbook for this class. I may find individual readings that will be of interest, which I will post to Canvas with the relevant module (for ease of access and remembering which goes with what topic!).

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

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.

Translation: At least sometimes, in some classes (and disproportionately in mathematically-based classes), you have earned grades that you know are not commensurate with your understanding of the material. This class is designed to make you demonstrate repeatedly, quickly, and with high accuracy that you can indeed use quantitative reasoning, both in abstract if repetitive settings as well as in settings applied to your major.

Grades: The grades you earn will reflect the degree to which you meet the course learning objectives. I use the +/- system for grades; while people who get an 89 and a 91 are substantially similar in terms of the learning they have accomplished, people who get an 89 and an 81 are not. I round to the nearest tenth of a percentage point on the final grade, and use “top 3/bottom 3” for pluses and minuses. Curves are great for car ads, but not for this class. Do not expect one.

Here are how your grade will be determined in this class:

| | |
|-------------|------------|
| Assignments | 100 points |
| Exam 1 | 200 points |
| Exam 2 | 200 points |
| Final Exam | 250 points |
| Project | 250 points |

Assignments. Assignments require you to apply what was taught in the lectures of that module. For assignments that are more quiz-like, they are all-or-nothing (that is, you get to try them multiple times, but have to earn 100% in order to get *any* of the points). For assignments that are more open-ended (e.g., download some data, make me an effective graph, and then describe what you have done; answer some open-ended questions), it is possible to earn grades between 0 and 100% of the points.

Exams. There will be three exams. They will all feature questions similar to those in assignments and also questions unlike any you have previously seen (but that require the same skill set). The small point difference between the final and the other two exams is simply to make 1000 points for the whole class.

Project. While assignments are great for practice and exams tell me whether you can do a thing today without your notes, what really matters is being able to apply these skills. Thus, there will be a project wherein you choose a data set, perform some analyses with that data set (including creating effective graphs and tables), and then write up your analysis. I will give you more details on this project throughout the semester.

Extras. Most of the time assignments will be available through Canvas, but I reserve the right to give an assignment in the form of a quiz in class. Thus, I recommend you come to class. If I give more of these, I will simply re-assign points from all assignments (e.g., if we start with 10 assignments, and I assign two more, each assignment will be worth ~8.3 points rather than 10 points).

Attendance: Attendance is essentially mandatory. Exams take place during class. Without getting your absence excused, you will get a zero on missed tests and in-class assignments. Excuses are valid for health, university events, work, or the death of family. I may require additional confirmation for the death of family and for work.¹ That said, do not drag yourself to class sick—just email me once you realize you're sick!

Make-Up Exams or Quizzes: There are 2 midterms during the semester. The dates listed with the schedule of topics are subject to change. You are responsible for any changes in the schedule announced in class. In the case of a missed exam, the next exam score will replace your missed score *provided your absence was excused*. Unexcused absences from exams result in a grade of zero. Regardless of the reason for missing a quiz or exam, no make-up will be given. In the event that you anticipate a conflict associated with a university-sponsored event, contact me in the first two weeks of class to discuss arranging an alternative time near an exam or quiz to take it.

Grade appeals: If you believe that I misgraded your exam, quiz, or assignment, you may submit a written appeal no later than 2 classes after I return the exam or quiz. Attach the relevant exam or quiz along with a written explanation of the appeal. I will respond in writing. If there is still a disagreement, we can meet during my office hours.

¹ Many students seem to have an unusually large number of great aunts and uncles to whom they were particularly close, and bosses who are demanding *at the precise moment* that I give exams. Weird, right?

Office Hours: Office hours belong to you, not to me. Please use them! They tend to get busy near exams and project deadlines, but otherwise tend not to be crowded. If they are crowded, we'll take over a nearby meeting room.

How to reach me: I will email you at your CSUCI email account; please check it regularly. Emailing me at my CSUCI email address is an effective way to reach me. Calling also works—I set up call forwarding on my office phone to my mobile. If you call and do not reach me, please leave your number in your message—I don't get full caller ID on forwarded calls to my mobile. Sorry.

Canvas: I use Canvas to post everything. Please check Canvas daily.

Disability Accommodations: CSU Channel Islands is committed to equal educational opportunities for qualified students with disabilities in compliance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. The mission of Disability Accommodation Services is to assist students with disabilities to realize their academic and personal potential. Students with physical, learning, or other disabilities are encouraged to contact the Disability Accommodation Services office at (805) 437-8510 for personal assistance and accommodations.

Academic Honesty: Most people don't cheat. If everyone doesn't cheat, then this part of the syllabus was unnecessary. Let's make it unnecessary, okay?

1. Academic dishonesty includes such things as cheating, inventing false information or citations, plagiarism and helping someone else commit an act of academic dishonesty. It usually involves an attempt by a student to show possession of a level of knowledge or skill that he/she does not possess.
2. Course instructors have the initial responsibility for detecting and dealing with academic dishonesty. Instructors who believe that an act of academic dishonesty has occurred are obligated to discuss the matter with the student(s) involved. Instructors should possess reasonable evidence of academic dishonesty. However, if circumstances prevent consultation with student(s), instructors may take whatever action (subject to student appeal) they deem appropriate.
3. Instructors who are convinced by the evidence that a student is guilty of academic dishonesty shall assign an appropriate academic penalty. If the instructors believe that the academic dishonesty reflects on the student's academic performance or the academic integrity in a course, the student's grade should be adversely affected. Suggested guidelines for appropriate actions are: an oral reprimand in cases where there is reasonable doubt that the student knew his/her action constituted academic dishonesty; a failing grade on the particular paper, project or examination where the act of dishonesty was unpremeditated, or where there were significant mitigating circumstances; a failing grade in the course where the dishonesty was premeditated or planned. The instructors will file incident reports with the Vice Presidents for Academic Affairs and for Student Affairs or their designees. These reports shall include a description of the alleged incident of academic dishonesty, any relevant documentation, and any recommendations for action that he/she deems appropriate.
4. The Vice President for Student Affairs shall maintain an Academic Dishonesty File of all cases of academic dishonesty with the appropriate documentation.
5. Student may appeal any actions taken on charges of academic dishonesty to the "Academic Appeals Board."
6. The Academic Appeals Board shall consist of faculty and at least one student.
7. Individuals may not participate as members of the Academic Appeals Board if they are participants in an appeal.
8. The decision of the Academic Appeals Board will be forwarded to the President of CSU Channel Islands, whose decision is final.

Course Outline: This is our plan for the semester... so far. I'll fill in the rest this week

| Week | Monday | Wednesday | Things due this week |
|--------------|--|----------------------------------|--|
| 08/22-24 | Intro; first-day quiz; Numeracy refresher | More numeracy! | Assignment |
| 08/29-31 | Equations w/one unknown | More equations! | Assignment |
| 09/05-07 | LABOR DAY | K equation, K unknown systems | Module Assignment Project: choose a topic |
| 09/12-14 | Derivatives | Local minima & maxima | Assignment |
| 09/19-21 | Exam 1 | Review exam | |
| 09/26-28 | Interpreting graphs | More interpreting! | Assignment Project: data set |
| 10/03-05 | Interpreting tables | Keep interpreting! | Assignment |
| 10/10-12 | Creating effective graphs | Creating effective graphs | Assignment for project: draft tables and graphs |
| 10/17-19 | COMING SOON! | COMING SOON! | COMING SOON! |
| 10/24-26 | COMING SOON! | COMING SOON! | COMING SOON! |
| 10/31-11/02 | COMING SOON! | COMING SOON! | COMING SOON! |
| 11/07-09 | COMING SOON! | COMING SOON! | COMING SOON! |
| 11/14-16 | COMING SOON! | COMING SOON! | COMING SOON! |
| 11/21-23 | COMING SOON! | COMING SOON! | COMING SOON! |
| 11/28-30 | COMING SOON! | COMING SOON! | COMING SOON! |
| 12/05 | 10:30am-12:30pm (note the time!) Final Exam | | |