

Fall 2023 BUS 320 Business Operations (3 credits)

Instructor: Yeawon Yoo, Ph.D.

Contact: yeawon.yoo@csuci.edu (Please make sure to include the tag [BUS 320] in the subject line of your email. I will do my best to respond to you within 24-48 hours. However, for course-related questions, I encourage you to utilize Piazza before contacting me directly, unless the matter is of a personal nature.)

Office Location: MVS Hall 2112

Office Hours: Tue 4-5 pm, Wed 3-4 pm, Thu 4-5 pm, and by appointment

Course Description: Exploration and application of quantitative techniques, systems analysis and operations analysis of business functions, with an emphasis on the optimization of process and operational efficiencies. A variety of management science methodologies will be applied to theoretical and real-world situations. Some use of Python, but no prior computing experience is necessary.

Prerequisites: For Business majors: BUS 309/ECON 309 and BUS 310 and MGT 326 with grades of Cor better and Junior Standing; for all other majors: MATH 140 or MATH 150; and Junior Standing

Program Learning Goals:

- (1) Critical thinking
- (2) Oral communication
- (3) Written Communication
- (4) Conduct (Ethics)
- (5) Competencies in discipline
- (6) Collaboration

Student Learning Outcomes (SLOs):

- (1) Describe orally and in writing the fundamentals of productivity and its linkage to the operations management process (1,2,3,5)
- (2) Write analyses of complex cases related to operations management (3,5)
- (3) Formulate operations strategy and present orally and in writing (1,2,3,5)
- (4) Identify, conceptualize, and develop solutions for operational problems, especially through the use of management science techniques (5)

Textbook: No mandatory materials need to be purchased for this course. However, essential course materials and texts will be made accessible through Canvas or can be obtained from the library at no expense. Additionally, the following optional textbooks are recommended for those seeking supplementary resources:

- Heizer, J., Render, B., Munson, C. L., & Griffin, P. *Operations management: sustainability and supply chain management.* New York, NY: Pearson this textbook is available on print reserve at Broome Library, situated behind the front desk, allowing for 2-hour checkouts. Multiple editions of the textbook are also present in the library.
- Stevenson, W. J., Hojati, M., & Cao, J. Operations management. New York: McGraw-Hill Education.

Tentative Course Outline:

Week 1 (8/22) Lec 1. Introduction to Course and OM (8/24) Lec 2. Productivity, Project Management I Week 2 (8/29) Lec 3. Project Management II, Forecasting (8/31) Lec 4. Forecasting - Time Series I Week 3 (9/5) Lec 5. Forecasting - Time Series II (9/7) Lec 6. Python and Google Colab (9/14) Lec 8. Forecasting - Linear Regression II Week 4 (9/12) Lec 7. Forecasting - Linear Regression I Week 5 (9/19) Lec 9. Optimization I (9/21) Lec 10. Optimization II Week 6 (9/26) Lec 11. Optimization III (9/28) Review for Mini-exam 1 Week 7 (10/3) Mini-exam 1 (10/5) Lec 12. Managing Quality Week 8 (10/10) Lec 13. Statistical Process Control I (10/12) Lec 14. Statistical Process Control II Week 9 (10/17) Lec 15. Statistical Process Control III (10/19) Lec 16. Process Strategies Week 10 (10/24) Lec 17. Capacity and Constraint Management (10/26) Lec 18. Location Strategies Week 11 (10/31) Lec 19. Layout Strategies (11/2) Lec 20. Supply Chain Management I Week 12 (11/7) Lec 21. Supply Chain Management II (11/9) Review for Mini-exam 2 Week 13 (11/14) Mini-exam 2 (11/16) Lec 22. Supply Chain Management III Week 14 (11/21) Lec 23. Supply Chain Management IV (11/23) Thanksgiving Break — No Class Week 15 (11/28) Buffer Day (11/30) Review for Final

Grading Policy: Your grades will be weighed as:

- Mini-exam 1 (20%), Mini-exam 2 (20%), Project (20%), Homework (20%), Final (20%).
- The **two lowest** homework scores will be dropped.
- Class attendance is NOT mandatory because I trust your maturity as a learner. However, I strongly recommend active participation in every session for an optimal learning experience and the potential for an enhanced grade. A considerable proportion of assignments and exam questions will closely correspond with problem sets covered in class. You might also come across insights like 'this could be a valuable exam inquiry.' Furthermore, opportunities for bonus credits might arise during class.
- The following scale, based on the final class percentage calculated according to the weights above, will be used:

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100% or higher (A+), 93-99.9% (A), 90-92.9% (A-) 87-89.9% (B+), 83-86.9% (B), 80-82.9% (B-) 77-79.9% (C+), 73-76.9% (C), 70-72.9% (C-) 67-69.9% (D+), 63-66.9% (D), 60-62.9% (D-), -59.9% (F)
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Submissions and Penalties: Homework and project will be posted on Canvas, so consult Canvas regularly.

- You are to prepare solutions NEATLY to each assignment on your own (no copying others work), scan your solutions to a **single PDF file**, then upload this PDF electronically via the provided submission link in Canvas by the deadline (in **California time**).
- After uploading your PDF, you are responsible for checking that all pages have been uploaded properly, completely, in focus, dark, and legible.
- When you submit a programming assignment, you need to properly comment on your code.
- If you receive any assistance from your classmates, friends, and/or website, you should write down (1) a name of them and a link of websites and (2) which type of assistance you receive. Simply copying code without referencing them is considered plagiarism.
- Late submissions will be considered with a penalty. Assignments handed in after the deadline could incur a point deduction of 10% for each day beyond the due date and time. To elaborate, deductions will apply as follows:
 - 0-23 hours 59 minutes: 10% deduction
 - 24-47 hours and 59 minutes: 20% deduction
 - 48-71 hours and 59 minutes: 30% deduction
 - Submissions received 72 hours or more after the specified deadline will receive a score of 0.

Make-up Policy: There will be no make up exams or quizzes except for the event of a university-approved absence on the day of the exam. Unapproved absences on the day of the exam will result in a score of 0. You must notify your instructor with your official excuse, before the date and time of the exam. If you have to miss an exam for an unforeseen reason, such as emergency, you must let me know as soon as you can, preferably within 24 hours of the missed examination.

Regrade requests for exams: I endeavor to grade the exams in a timely manner and return the graded exams to you in the following week. Every effort is made to grade exams accurately. However, if you notice an error in the grading and wish to request a regrade, you must send me an email about which problems you think are inaccurately graded and why, within 3 days in which the graded exam is returned (the date that the graded exam is returned is counted as Day 0). No late regrade requests will be accepted. Note that the requests can result in a grade that is lower, equal, or higher.

Important Dates:

Mini-exam #1	October 3, 2023
Mini-exam #2	November 14, 2023
Project	TBD
Final Exam	December 5, 2023

Guidelines for the Acceptable and Unacceptable Use of AI: In this course, the utilization of generative AI tools (e.g., ChatGPT, etc.) is authorized for certain circumstances with citation (see how to cite ChatGPT).

- Permissible Use:
 - Writing an email
 - Employing AI tools for brainstorming and refining your ideas
 - Using AI tools to locate information relevant to your chosen topic (but, you need to check if the information is correct/real or not)
 - Verifying and enhancing grammar as well as writing style using AI tools
- Prohibited Use:
 - Drafting (=actually writing the words of the paper) an outline to systematically structure your thoughts and ideas
 - Using AI tools to write any of the assignments

Academic Honesty: Academic integrity is the responsibility of all members of the CSUCI community. We, as members of the university community, 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 California State University Channel Islands and members of the university community. All university community members 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. In this course, you must be honest and truthful. 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. In addition, I encourage collaboration on homework assignment with your friends, colleagues and/or teaching assistants. This is an important part of your learning. However, whatever work you collaborate on must be thrown away before you write up your own solutions – this is to assure that the work you submit is your own. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Report any violations you witness to the instructor.

Disability Statement: 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 class-room accommodations.

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, legistlative 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.

Copyrighted Content: Course content, including lectures, are copyrighted materials and students may not share outside the class, upload to online websites not approved by the instructor, sell, or distribute course content or notes taken during the conduct of the course. You must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

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. CSU Channel Islands 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 CSU Channel Islands' 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.

Disclaimer: Information contained in this syllabus, other than that mandated by the University, may be subject to change with advance notice, as deemed appropriate by the instructor.