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Jones Graduate School of Business

MGMW 574: Operations Management

Spring 2027 Syllabus

Course Information

Instructor: Süleyman Kerimov, kerimov@rice.edu
Office Hours: By appointment, Virani Hall 389
Meeting Times:

- March 19, 2027, Friday, 4:00PM-9:30PM
- April 3, 2027, Saturday, 1:30PM-6:30PM
- April 16, 2027, Friday, 4:00PM-9:30PM
- May 1, 2027, Saturday, 7:30AM-12:30PM

Location: TBD
Course Website: Canvas

Course Description

Operations management is a fundamental discipline that focuses on the effective planning of products and services, scheduling of manufacturing, and control of service entities to achieve competitive advantage and efficiency. The main goal of this course is to provide a general introduction to the design and integration of successful operations procedures both within the organization and across the supply chain. The course focuses on understanding, managing, and improving processes, and flows of products, customers, and information. This course covers a mix of qualitative concepts and quantitative techniques to deal with bottlenecks, inventory, queues, quality management, and some strategic issues in operations.

Course Objectives

On successful completion of this course, you will be able to:

- Develop an understanding of a range of problems faced in operations management,
- Understand the strategic role of operations management in different industries,
- Understand strategic and operational levels of decision making, and form an appropriate solution methodology to support these decisions,
- Learn fundamental trade-offs in inventory and supply chain management.

Faculty Introduction

Süleyman Kerimov is an Assistant Professor of Operations Management at the Jesse H. Jones Graduate School of Business at Rice University. He holds a Ph.D. in Operations Research from Stanford University and a B.S. in Mathematics from Bilkent University. His research interests include market design, applied probability, and healthcare operations.

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Course Materials

Required:

- **Reading:** The Goal: A Business Graphic Novel, by Eliyahu M. Goldratt (Author), Dwight Jon Zimmerman (Editor), Dean Motter (Illustrator), published by North River Press Publishing Corporation, 2017, or alternatively, The Goal: A Process of Ongoing Improvement – 30th Anniversary Edition, 3rd edition, by Eliyahu M. Goldratt (Author), Jeff Cox (Author), published by North River Press, 2014.
- **Coursepack:** Harvard Business Publishing Education Coursepack.

Recommended:

Material is self-contained. However, you may find the following textbooks helpful:

1. Matching Supply with Demand: An Introduction to Operations Management, 5th Edition, by Gerard Cachon and Christian Terwiesch, published by McGraw-Hill Education, 2024.
2. Production and Operations Analysis, 8th Edition, by Steven Nahmias and Tava Lennon Olsen, published by Waveland Press, Inc., 2021.

Teams: For the case, homework, and The Goal reading assignment, you will work together in a team of at most 4 people. **Please form your teams as soon as possible on Canvas**, and try to keep your team throughout the semester. I expect each team member to work on their own solutions first and then consult with your fellows unless stated otherwise (I may occasionally ask for anonymous feedback from teams to evaluate each team member).

Evaluation and Grading Components

Your course grade will be determined according to the following weights:

- **Class Contribution (15%):** I strongly encourage you to engage and participate in class. This is essential for our learning experience. We will have in-class exercises and regular discussions about the course material, and I expect you to contribute and be active. Get ready for cold calls. The class contribution grading component is at the instructor's discretion.
- **Quizzes (30%):** There will be 4 written in-class quizzes, each given at the end of the class. **This is the only assignment where the use of any electronics or AI tools is not allowed.**
- **Case and Homework Assignment (30%):** There will be one case (15%) and one (15%) homework assignment. For the case, you will answer questions about real-world business scenarios. For the homework assignment, the questions will be more theoretical. You will submit one report per team.
- **The Goal Reading Assignment (25%):** You should start reading the book on the first week of classes. As you read the book, write down the main ideas that you find striking. I expect you to summarize three main ideas you got from the book and indicate if and how these ideas could be used in some business context. You will submit one report per team, which should not exceed 5 pages of text (excluding figures, double spaced, 12-point font). This is an unstructured assignment by design. I want you to be able to present your thoughts about the book and its potential implementation in any way you see fit.
- I will not accept any late submissions. All assignments are due at 11:59pm CT on the due date.

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Course Policies

Grading

- Any regrading request must be made **within three days** after grades are posted. Your request must include a detailed note about the objection. You should be aware that the entire assessment will be regraded.
- All submitted work must include the signed Honor Code pledge (see Rice University Honor Code below).

Office Hours

- Other than my weekly office hours, please do not hesitate to stop by my office whenever you see my door open to clarify the course material or discuss other issues.
- I am also happy to deal with questions and issues via email, and please send me an email if you would like to set up a time to meet.

Laptop and Cell Phone Policy

- Following the JGSB policies, laptops should remain closed except when instructed otherwise. You may use an electronic tablet to take notes provided it is lying flat on the desk and its use is restricted to annotating notes (i.e., no social media, web surfing, etc.). Empirical evidence suggests that diverting your attention to other matters (e.g., Instagram, X, studying for the quiz you have in the next class) impedes not only your learning, but more importantly also those of your peers sitting around you (which is not fair!).
- Cell phones must be turned off or put on silent mode. You are requested to avoid the use of email, messaging, etc. during class.

Classroom

- Please avoid disrupting me and your fellow classmates by arriving late. Lateness, especially if it is habitual, will result in a reduction in your class contribution grade. **Please report any absences and late arrivals to me**.
- I will try to learn your names as fast as possible. To help me, please have your name cards up for the entire semester.
- You are responsible for checking the Canvas course website regularly for course materials and announcements.

Syllabus Changes

- The exam and assignment deadlines in the tentative course outline, and course grade weights are **finalized and definite**.
- The rest of the information contained in this syllabus is guide for the course and may be subject to change with reasonable advance notice, as deemed appropriate by the instructor.

Use of Generative AI

This course allows for the thoughtful use of AI tools to support your learning process. You may use AI for purposes such as:

- Enhancing your writing through proofreading and grammar checks

- Exploring initial ideas or creating preliminary outlines for essays or projects (which you will then develop independently)
- Verifying facts or identifying relevant sources

The primary intellectual contribution, including analysis, argumentation, and original content creation, should come from you. When you use AI tools, please provide a brief explanation of how they contributed to your work and include appropriate citations. If you're unsure about how to use AI tools effectively or have limited access to them, please consult with the instructor for guidance or alternative options.

Academic Accommodations for Disability

If you have a documented disability or other condition that may affect academic performance, you should:

- Make sure this documentation is on file with the Disability Resource Center (Allen Center, Room 111, adarice@rice.edu, x5841) to determine the accommodations you need.
- Notify the instructor at the beginning of the term so we can discuss your accommodation needs.

Honor Code

In this course, all students will be held to the standards of the Rice Honor Code, a code that you pledged to honor when you matriculated at this institution. If you are unfamiliar with the details of this code and how it is administered, you should consult the Honor System Handbook. This handbook outlines the University's expectations for the integrity of your academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. **All submitted work must include the signed Honor Code pledge**: "On my honor, I have neither given nor received any unauthorized aid on this (assignment, exam, etc.)."

Tentative Course Outline

Lecture	Date	Topic	Notes
1	Mar 19	Introduction to Operations Management, Designing Marketplaces, Process Flows	- Read the PATA Case and probability notes. - Start reading The Goal. - **Quiz 1**.
2	Apr 3	Capacity Management, Queueing Theory	- Read the probability notes - Nahmias: Ch. 8.2-8.5. - Cachon: Ch.3. - **BAT Case out** - **Quiz 2**
3	Apr 16	Inventory and Supply Chain Management	- Nahmias: Ch. 4.5-4.7, 6.3-6.4. - Cachon: Ch. 5.6, 14. - **BAT Case due**. - **Quiz 3**.
4	May 1	Revenue Management	- Nahmias: Ch. 8.8. - **Homework out**. - **Quiz 4**