

Sabancı MBA Program
Fall 2021
OPIM 501 – Operations Management

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Type	Time	Day	Where
Class	9:40-12:30	Wednesdays	In-class (SBS G013-14) & Online (Zoom*)

Zoom* The zoom link will be posted as a SUCourse announcement at the beginning of week 1.

Course Description:

Operations management deals with the design, production and distribution of goods and services. Managerial issues and decision problems include the design, planning, and control of processes at strategic and operational levels. Concepts and tools used in generating solutions to problems and their implementation aspects are discussed. Operating systems from different areas such as manufacturing, service, and transportation are exemplified to expose students to the similarities and differences in their characteristics. Topics include operations strategy, process design and improvement, quality management, and supply chain management.

Course Objectives:

The objectives of this course include the following:

1. To understand components of the operations management function in different organizational settings.
2. To understand the strategic and tactical issues in operations management.
3. To develop an understanding of business processes, process flows, and process quality.
4. To understand the concepts of operations planning and control such as forecasting and inventory management.
5. To be able to communicate the results of operations analysis, orally and in writing.

Learning Outcomes:

Upon successful completion of the course, the student should be able to:

1. Define operations management and its relation to the other functions.
2. Demonstrate understanding of the product process matrix and its strategic implications.
3. Analyze and improve process performance.
4. Assess the impact of uncertainty on system performance.
5. Analyze and improve process quality.
6. Demonstrate understanding of system dynamics in supply chains.
7. Use different forecasting techniques and interpret results.
8. Demonstrate understanding of the basic inventory concepts.

Course Material:

Textbook:

We will be closely following the textbook given below.

Roger Schroeder, Susan Goldstein, M. Johnny Rungtusanatham, *Operations Management in the Supply Chain – Decisions and Cases*, 2017, 7th Edition, McGraw Hill.

The textbook is available at Homer bookstore. You are expected to read the chapters mentioned in the course schedule before each session.

Case Studies:

Cases are used as real-world examples of the topics. There will be three case analyses to be prepared as a team. The teams should work to address the issues raised in the case, clearly identify the problems to be studied, determine and apply the necessary tools for quantitative analysis.

The details on the case studies are provided below:

Case 1	Date: October 15, 2021 Friday 17:00
Case (Type):	To Be Announced
Subject:	Operations & Supply Chain Strategy (Chapters 2)
Teamwork? (Grading):	Yes (Team)
Case 2	Date: November 12, 2021 Friday 17:00
Case (Type):	To Be Announced
Subject:	Process Flow Analysis (Chapter 6) and maybe Managing Queues
Teamwork? (Grading):	Yes (Team)
Case 3	Date: December 10, 2021 Friday 17:00
Case (Type):	To Be Announced
Subject:	Independent Demand Inventory (Chapters 14)
Teamwork? (Grading):	Yes (Team)

Reading Assignments

Some articles and cases are used as real-world examples of the topics discussed in class. For each week, the required and optional readings will be listed in the SUCourse website. The required reading assignments will be used as part of the in-class exercises. Hence, it is of utmost importance that you come to class, having read them before the corresponding session.

Optional Reading Material:

E. M. Goldratt, J. Cox, 3rd Edition, 2004, *The Goal: A Process of Ongoing Improvement*, North River Press, Croton-on-Hudson, NY.

Course Web:

Course syllabus, required reading assignments, lecture notes, recorded class sessions and Excel in-class exercises will be available in the form of documents, slides, videos, and spreadsheets on OPIM 501 SUCourse site. Students are expected to visit SUCourse a couple of times each week.

The **pre-lecture and after-lecture notes** will be posted on SUCourse which will be organized on a week and chapter basis so that students can follow the course schedule posted at the end of this syllabus. The pre-lecture slides include majority of the slides and are posted before the lectures so that students can print them or download them to take they can take notes during the lectures.

The **announcements component of SUCourse** will be actively used for sharing announcements. Each announcement posted on SUCourse will be emailed to the students, thus the students are responsible for regularly checking their emails and appropriately setting the emailing options in their SUCourse account.

The in-class exercises are to be downloaded and uploaded via the **assignment component**. Similarly, the case analysis reports, the term project presentations and final reports are to be uploaded under the designated assignment.

For the individual assessments, cases, and term project, the **Turnitin tool** will be used. Sabanci University uses a very powerful web-based tool called Turnitin. Turnitin is the worldwide standard in online plagiarism prevention. It allows instructors to compare student papers against a database composed of millions of articles. Every paper you submit for the midterm, case analysis reports, and term project will be scanned by Turnitin, and results will be reflected in your grades.

Instructional Design:

The course will be taught using a blend of lectures, in-class exercises, individual assessments, case analysis reports and term projects prepared by the students in teams. There will be **in-class and online synchronous lectures**. The course includes various **individual assessments** such as quizzes, midterm, and/or reflection papers. Further details regarding the nature of each individual assessment will be posted on SUCourse,

Cases and the term project are used as real-world examples of the business analytics tools covered. The students are asked to submit **three case analysis reports** in teams consisting of 4-5 students. Similarly, **the term project** involves a final report and a presentation and can be done in teams of 1-5 students. The first two cases will be done according to the announced MBA teams. The international exchange students will be added to these teams. The teams are allowed to change in the third case and in the term project, and this decision is at the discretion of each team.

The **pre-lecture notes** will be posted on SUCourse in the main page, which will be organized according to the week number and chapter name to match the schedule posted at the end of this schedule. The **post-lecture notes** prepared for each chapter will be available to the students at the SUCourse site after each chapter is completely covered in the lectures. The **recordings of the in-class synchronous lectures** will be provided on SUCourse after each class to give the students the opportunity to review the material and learn at their own pace.

In-class and online synchronous lectures are also made interactive via **in-class exercises** that are carried out by the students either individually or in groups. The students who are in-class might be required to connect to zoom for the in-class exercises. These assignments can be short quantitative problems or conceptual questions which enhance the learning process by active participation. Some of the in-class exercises are spreadsheet analysis of the problems where the techniques that are being taught are used. Students will also be provided other cases and articles to be analyzed and used as part of the in-class exercises. Also, some of the in-class exercises have higher points

as they involve group discussions and write-ups associated with that week's required reading assignment. Note that recordings will not be made during the active learning part of a lecture. Some of the in-class exercises done in the lectures might be pop-quizzes which are included in your individual assessment grade

Grading:

Attendance & Participation:	10%
In-Class Exercises:	20%
Individual Assessment:	20%
Case Analysis:	25%
Term Project:	25%

Peer Evaluation in Teamwork

Students will be asked to provide an evaluation of the members of their team in the cases analysis. Each student will divide 100 points between the members of her team, including him/herself. This division should reflect that person's judgment of the contribution of the members of her team. The scores should not be merely functions of time spent by each member, but they should be measures of the "contribution;" their relative contribution to the idea generation, research, analysis, writing, oral presentation, report writing, etc. If the team was highly functional, and each member did what they committed themselves to, then the student can assign the same mark to each member of the team. If, on the other hand, some members of the team did not fulfill their commitments and did not contribute as much as the others, then points can be distributed unevenly.

The points submitted by all members of the team will be aggregated by the instructor. Every student will be given his/her aggregate peer evaluation, without disclosing the individual peer evaluations to the students.

In case there is no consensus among the team, for example, if three students divide the marks evenly and the fourth one divides them unevenly, then the instructor will use his/her judgment to assign peer evaluation marks--possibly after meeting with the members of the team.

In cases where there are conflicting marks, it is most likely that the instructor will meet with the team members and provide a mark based on an interview. For example, in a group of four, if Students A and B believe they did most of the work, and Students C and D believe otherwise, the team may be called in for an interview in order to be fair to everyone.

Past experience indicates that in most groups points will be distributed evenly. There will be a few groups where peer evaluations will play a role in the marks. The primary goal of this exercise is to avoid giving undeserved credit to individuals who did not help their teams. However, it is possible to have upwards adjustments of marks in case of students who have done more than what the group expected of them.

The peer evaluation will have a direct impact on your case analysis grades. To give a simple example, if the group mark is 20 out of 25, and if your peer evaluation indicates that your contribution was less than what was expected, then your case analysis grade mark will be less than 20 out of 25. There are no simple rules for adjustment.

Requirements:

Attendance & Participation

Class attendance includes being in the class (physically or through zoom) **on-time in each session, hence, we have a poll for acknowledging your presence at the beginning of each session.** It also includes **getting involved in the learning process** during class hours without distracting yourself or your classmates by various non-class related activities.

Class participation includes getting involved in the learning process during class hours either physically or online. **The non-verbal participation** requires being promptly in class and engagement via complying with classroom policies and conduct (see page 8 of this syllabus). Points can be taken off for not complying with the classroom policies and conduct. **The verbal participation** involves contributing to class discussions positively and regularly and asking questions which cannot be possible without due preparation (hence quality, relevance, frequency, and timing will be accounted for). Reading the material to be covered and working out any problems that are suggested will prepare you for each class session. Hence, last year we have actively used zoom polls and chat to enable active participation of our students.

In-Class Exercises

In-class exercises will be assigned during class hours. They may be group or individual exercises. These will be completed during class and submitted at the end of the class hour. Still very few of them might be started in-class and submitted afterward at the times to be announced by your instructor. Reading the posted required reading assignments are essential for your success in the in-class exercises.

You are expected to work on the assigned exercises by communicating with your classmates and the instructor (through the Zoom Breakout Rooms if required). Although these in-class exercises will be graded, majority of them are not quizzes but means to learn the topics actively during physical and online synchronous class hours. Students who are not present physically or on zoom will not receive grades from such exercises. In the case of glitches preventing the expected presence, students should send a short email and inform the instructor immediately to find a solution.

Some of the in-class exercises might be pop-quizzes that are to be included in your individual assessment grade.

Individual Assessments

There will be a number of individual assessments in the form of pop-quizzes, midterm and reflection papers. The individual assessments are not equal weight and the weights will be posted throughout the semester as they are announced/conducted.

The details of the individual assessments (other than the pop-quizzes) will be posted on SUCourse. The individual assessment in the form of a midterm will comply the rules announced by Sabanci University. The current instructions we have received requires it to be an in-class exam and a suggested duration of 90 minutes. In case the midterm is longer than 90 minutes it is required to be organized in two sessions separated with a break. Hence, the midterm can have a closed book (closed laptop) section consisting of multiple choice, true/false questions in addition to short

answer questions where you might be required to do certain analysis or interpret some given results. In the second part of the midterm, we might have an open book section where you open your laptops and answer the questions by doing the required quantitative analysis.

If you have missed or will miss any individual assessment and you have an approved health report, please get in touch with your instructor immediately to formulate a proper makeup for the missed individual assessment.

Case Analysis

There will be three case assignments to be prepared as a team (see page 2). The teams should work to address the issues raised in the case, clearly identify the problems to be studied, determine, and apply the necessary tools for quantitative analysis. A case report will be prepared for each case explaining the approach taken by the team to address the situation, to present their analysis and recommendations.

The first two cases will be done according to the announced MBA teams. The international exchange students will be added to these teams. The teams are allowed to change in the third case and in the term project, and this decision is at the discretion of each team.

Term Project

The term project will be done in teams of 1-4 students. The term project teams can be different from the case teams to ensure students with similar interests can work together on their term project.

Students will be provided **two options** for the term project. The first option involves analyzing a real-life business from an operations and supply chain management perspective. The second option involves exploring how new concepts such as Industry 4.0, digitalization, blockchains, circular economy and value chains, servitization of products or productization of services, supply chain disruptions including Covid-19 pandemic, additive manufacturing, direct digital manufacturing, see-now-buy-now business model in fashion will change operations and supply chain management. The different phases and deadlines of the term project will be announced in class and posted on the SUCourse website. Students are expected to follow these announcements closely.

The term project involves a presentation and a final report. The **final report of the term project** is due to week 13. The final report of the term project must show the names of all team members. The teams should submit their final report through SUCourse only once as a PDF file. The teams will be expected to **present their term project** in week 14. The PowerPoint slides need to be posted through the designated SUCourse Assignment. The presentation is expected to be 10 minutes long and summarize the term project. While you are presenting the slides and the speaker's camera should be open and included in the screen sharing. It is at the discretion of the project team to decide how many students or who will present.

Late Submission Policy

Late submissions will not be allowed for the in-class exercises and individual assessments. However, for the case analysis reports, term project presentations and term project reports only one-day lateness might be allowed with a lateness penalty of 10-20%, which is at the full discretion of the instructor.

Interviews

As part of the assessment of all course requirements, the faculty member may invite a student or a team for an online interview to go through the solutions and underlying the case report, individual assessment, in-class exercise or term project report. Considering the guidelines provided to the faculty members by Sabancı University, it is at the full discretion of the faculty member to make these interviews or not. The guidelines provided for the interview require the online interview to be recorded. It is worthwhile to note that students should not feel stressed due to the possibility of the conduct of the interviews as they will be done only on a need basis. Students are expected to check their emails regularly and positively respond to the interview email invitation in a timely manner (within one-two business days is acceptable).

Academic Honesty

Learning is enhanced through cooperation and as such, you are encouraged to work in groups, ask for and give help freely in all appropriate settings. At the same time, as a matter of personal integrity, you should only represent your own work as yours. Any work that is submitted to be evaluated in this class should be an original piece of writing, presenting your ideas in your own words. Everything you borrow from books, articles, or web sites (including those in the syllabus) should be properly cited. Although you are encouraged to discuss your ideas with others (including your friends in the class), it is important that you do not share your writing (slides, MS Excel files, reports, etc.) with anyone. Using ideas, text, and other intellectual property developed by someone else while claiming it is your original work is *plagiarism*. Copying from others or providing answers or information, written or oral, to others is *cheating*. Unauthorized help from another person or having someone else write one's paper or assignment is *collusion*. Cheating, plagiarism, and collusion are serious offenses that could result in an F grade and disciplinary action.

Specific to this course, it is important to know that submitting a computer file (e.g. Excel workbook) prepared by someone else, *even partially*, is cheating. You may talk to others about assignments but in the end, you should be doing all the work. It is important that you do not share your solutions as Excel files with anyone until it has been graded. Sharing your file with others could easily tempt them to submit part or all of it as their own. This would be cheating and, in most cases, easy to detect. Once you share your file with someone, it could easily be forwarded to a lot of students and some of whom could cheat or plagiarize. Plagiarism is a very serious misdeed that can result in a reduced grade or an F (for the assignment and/or the course). *Please pay utmost attention to avoid such accusation.*

Classroom Policies and Conduct

Sabancı MBA Program **values participatory learning**. Establishing the necessary social order for a **participatory learning environment requires that we all:**

- Start each fifty-minute class session on time. This involves coming to each class physically or online on time.
- Turn off all cell phones, tablets, laptops or other electronic devices unless they are used as part of the lecture.

- Do not leave and re-enter the class during each fifty-minute long lecture (of course glitch related exceptions are granted for online students and students in class can silently get the consent of the instructor by showing their eyes for a folded lens emergency and the like).
- Come prepared to make helpful comments and ask questions that facilitate your own understanding and that of your classmates. This requires that you complete the assigned readings for each session before the class starts.

Due to the Covid-19 pandemic, the students physically coming to the class have to fully comply with all the rules announced to the students by Sabanci University Covid Education Committee. Please make sure you comply with the rules associated with the following titles that will be shared with you by Sabanci University Administration during the first two weeks of the semester:

- **Social Distancing and Masks:** Both the instructor and the students must wear masks properly throughout the lecture, lab, studio hours. **There will be no exception to this regulation indoors and in the classrooms.** Moreover, seating arrangements have been made to ensure proper social distancing.
- **Classrooms and Seating Arrangements: Social distancing will be observed** in every hybrid or only-physical lecture. Follow the posted seating arrangements and get seated accordingly.
- **Office Hours:** All office hours are strongly advised to be held online via Zoom this semester. Designated office hours will be announced on SUCourse. If they do not work for you send an email (at least one-two days before) to arrange an office hour.

Respect for Diversity

We must treat every individual with respect. We are diverse in many ways, and this diversity is fundamental to building and maintaining an equitable and inclusive campus community. Diversity can refer to multiple ways that we identify ourselves, including but not limited to race, color, national origin, language, sex, disability, age, sexual orientation, gender identity, religion, creed, ancestry, or beliefs. Each of these diverse identities, along with many others not mentioned here, shape the perspectives our students, faculty, and staff bring to our campus. We, at Sabanci University, will work to promote diversity, equity and inclusion not only because diversity fuels excellence and innovation, but because we want to pursue justice. We acknowledge our imperfections while we also fully commit to the work, inside and outside of our classrooms, of building and sustaining a campus community that increasingly embraces these core values.

I (like many people) am still in the process of learning about diverse perspectives and identities. If something was said in class (by anyone) that made you feel uncomfortable, please talk to me about it. (Again, anonymous feedback is always an option). It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit.

Tentative Course Schedule:

Week 1	Date: September 29, 2021, Wednesday
	Topic: The Operations Function
	Requirements: Read Chapter 1
Week 2	Date: October 06, 2021, Wednesday
	Topic: Operations & Supply Chain Strategy
	Requirements: Read Chapter 2 Start Case 1.
Week 3	Date: October 13, 2021, Wednesday
	Topic: Process Selection and Service Process Design
	Requirements: Read Chapters 4 and 5.
	Case 1 Due: October 15, 2021 Friday 17:00
Week 4	Date: October 20, 2021, Wednesday
	Topic: Process-Flow Analysis
	Requirements: Read Chapter 6
Week 5	Date: October 27, 2021, Wednesday
	Topic: Process-Flow Analysis (Continued)
	Requirements: Read Chapter 6. Start Case 2
Week 6	Date: November 03, 2021, Wednesday
	Topic: Managing Queues (This topic is not covered in your textbook)
	Requirements: Attend the class.
Week 7	Date: November 10, 2021, Wednesday
	Topic: Managing Quality
	Requirements: Read Chapter 8.
	Case 2 Due November 12, 2021 Friday 17:00
Week 8	Date: November 17, 2021, Wednesday
	Topic: Quality Control and Improvement
	Requirements: Read Chapter 9.
Week 9	Date: November 24, 2021, Wednesday
	Topic: Independent-Demand Inventory and Newsvendor Problem
	Requirements: Read Chapter 14.
Week 10	Date: December 01, 2021, Wednesday
	Topic: Independent-Demand Inventory and Newsvendor Problem (Continued)
	Requirements: Read Chapter 14. Start Case 3.
Week 11	Date: December 08, 2021, Wednesday
	Topic: Supply Chain Management
	Requirements: Read chapter 16.
	Case 3 Due: December 10, 2021 Friday 17:00
Week 12	Date: December 15, 2021, Wednesday
	Topic: Supply Chain Management (Continued)
	Requirements: Read chapter 16.
Week 13	Date: December 22, 2021, Wednesday
	Topic: Forecasting and Capacity Planning
	Requirements: Read Chapters 10 and 11.
	Term Project Due: December 24, 2021 Friday 17:00
Week 14	Date: December 29, 2021, Wednesday
	Requirements Term Project Presentations