

**BA in Management Program**  
**Spring 2021**  
**OPIM 301 – Operations Management**

**Instructor:** Tevhide Altekin  
**Office:** SBS 1005  
**Phone:** (216) 483 9676  
**Fax:** (216) 483 9699  
**E-mail:** tevhide.altekin@sabanciuniv.edu  
**Web:** SUCourse+  
**Schedule:** Thursdays 13:40-15:30 & Fridays 14:40-15:30 @ Zoom  
**Recitations:** Fridays 15:40-16:30 @ Zoom  
**Office Hours:** By appointment

**Course Content:**

Operations management encompasses decisions related with the production of goods and services. This course exposes the students to issues such as product and process design, capacity planning, inventory planning, and quality management at varying levels of decision making from strategic to operational. In addition to the introduction of basic concepts, analytical tools for supporting good decision-making are also introduced.

**Course Objectives:**

The operations function along with finance and marketing is one of the primary functions of an organization. Operations management is concerned with the efficient and effective production and delivery of goods and services. Thus, it involves managing of the processes that transforms inputs into outputs.

While providing an introduction to operations management, the objectives of this course include the following:

1. To familiarize you with the components of operations management in different organizational settings.
2. To develop an understanding of strategic and tactical issues confronting operations managers.
3. To equip you with the skills as well as the language, concepts, tools and insights on understanding, analyzing and improving main operations management issues so as to gain competitive advantage.
4. To develop an understanding of business processes, process flows, and process quality.
5. To introduce operations planning and control issues including demand management and forecasting, capacity management, aggregate sales and operations planning, and inventory management.

## 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 on product-process matrix and its strategic implications.
3. Analyze and improve process performance.
4. Assess the impact of uncertainty on system performance.
5. Assess and improve process quality.
6. Describe the bullwhip effect, its reasons and how to mitigate it in supply chains.
7. Perform aggregate sales and operations planning.
8. Demonstrate his/her understanding on basic inventory management concepts.

## Course Material:

### Textbook:

We will be closely following the textbook given below. You are expected to read the chapters mentioned in the course outline before each session.

F. R. Chase and R. B. Jacobs, *Operations and Supply Chain Management*, 15<sup>th</sup> Global Edition, 2018 McGraw-Hill (CJ15 for short).

Please use the following link to purchase the textbook:

<https://www.homerbooks.com/urun/operations-and-supply-chain-management>

### Case Studies:

There will be six case studies to be analyzed and prepared as a team (one every two weeks). The cases and the case questions will be posted on SUCourse+ when the corresponding Chapter is started in class. The teams should address the issues raised in the case questions and/or answer the questions posted by the instructor, clearly identify the problem, determine and apply the necessary tools for quantitative analysis. Teams can consist of 1-4 students. The details on the cases are provided below:

<b>Case 1</b>	<b>Date:</b>	Week 3: 10 March 2021, Wednesday 17:00 @ SUCourse+
<b>Type:</b>		Textbook Case or Harvard Business School Case
<b>Subject:</b>		Strategy (Chapter 2)
<b>Teamwork?/Grading:</b>		Yes/ Team
<b>Case 2</b>	<b>Date:</b>	Week 5: 24 March 2021, Wednesday 17:00 @ SUCourse+
<b>Type:</b>		Textbook Case or Harvard Business School Case
<b>Subject:</b>		Service Processes (Chapter 9)
<b>Teamwork?/Grading:</b>		Yes/ Team
<b>Case 3</b>	<b>Date:</b>	Week 7: 07 April 2021, Wednesday 17:00 @ SUCourse+
<b>Type:</b>		Textbook Case or Harvard Business School Case
<b>Subject:</b>		Process Design and Analysis (Chapter 11)
<b>Teamwork?/Grading:</b>		Yes/ Team

<b>Case 4</b>	<b>Date:</b>	Week 9: 21 April 21, 2021, Wednesday 17:00 @ SUCourse+
	<b>Type:</b>	Textbook Case or Harvard Business School Case
	<b>Subject:</b>	Statistical Process Control (Chapter 13)
	<b>Teamwork?/Grading:</b>	Yes/ Team
<b>Case 5</b>	<b>Date:</b>	Week 11: 05 May 2021, Wednesday 17:00 @ SUCourse+
	<b>Type:</b>	Textbook Case or Harvard Business School Case
	<b>Subject:</b>	Global Sourcing and Procurement (Chapter 16)
	<b>Teamwork?/Grading:</b>	Yes/ Team
<b>Case 6</b>	<b>Date:</b>	Week 13: 21 May 2021, Friday 17:00 @ SUCourse+
	<b>Type:</b>	Textbook Case or Harvard Business School Case
	<b>Subject:</b>	Inventory Management (Chapter 20)
	<b>Teamwork?/Grading:</b>	Yes/ Team

Reading Assignment:

Paper assigned as reading assignment include the following:

<b>Article</b>	<b>Date:</b>	<b>29 April 2021</b>
		<b>The Bullwhip Effect in Supply Chains”, H. L. Lee, V. Padmanabhan, S. Whang, Sloan Management Review, 38 (3), Spr 1997, 93-102 (available for downloading through SU Information Center).</b>
		<b>Brief Description:</b> Tremendous variability in orders along the supply chain can plague companies trying to eliminate excess inventory, forecast product demand, and simply make their supply chain more efficient. What causes the bullwhip effect that distorts information as it is transmitted up the chain? The authors identify four major causes and suggest several ways to mitigate the bullwhip effect.

Additional readings may be assigned as needed over the course of the semester.

**Course Web:**

Course syllabus, recorded lecture videos, pre- and after-lecture notes, in-class exercises, as well as their solutions and your grades will be available in the form of videos and document files on OPIM 301 SUCourse+ site. Students are expected to visit SUCourse+ a couple of times each week.

The Announcements component of SUCourse+ will be actively used for sharing announcements. Each announcement put to SUCourse+ will be emailed to the students, thus the students are responsible for checking their emails and appropriately setting the emailing options in their SUCourse+ account. The in-class exercises are to be downloaded and uploaded (and similarly the case analysis reports are to be uploaded) via the Assignments component. 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. Due to the national and religious holidays, we have 25 sessions instead of 28 sessions. Hence, for some of the qualitative chapters the recitation hours might be actively used for coverage of course topics.

Sabancı University uses a very powerful web-based tool called Turnitin. For the case analysis reports, term project reports and some of the short answer in-class exercises, the Turnitin tool will be used. 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 case analysis reports, term project and some of the short answer in-class exercises will be scanned by Turnitin, and results will be reflected in your grades.

### **Instructional Design – Method of Learning:**

The course will be taught using a blend of synchronous lectures, synchronous active learning through in-class exercises, case analysis reports, and term project prepared in teams.

The pre-lecture notes will be posted on SUCourse+ one day before each session. Please download them and have them available in front of you (could be printed or opened on your tablet) so that you can follow the course better by filling in the blanks, doing the calculations and taking notes on them.

The after-lecture notes and recorded videos will also be available at SUCourse+ site each chapter lectures. The provision of the synchronous lecture recordings aim to give the students the opportunity to review the material and learn at their own pace.

Synchronous lectures are also made highly interactive via in-class exercises that are carried out by the students either individually or sometimes in groups. The in-class exercises can be of various forms such as zoom polls (true or false questions or multiple-choice questions), short answer questions on posted reading assignment (see page 3 of this syllabus) and assignments involving finding the solutions of posted questions. While some of the in-class exercises can be in the form of quizzes, majority of them are not quizzes and aim to enhance the learning process by active participation. One-two of the in-class exercises might involve spreadsheet analysis of problems using the techniques that are being taught.

Cases are used as real-world examples of the operations management concepts and tools covered, and the students are asked to submit six case analysis reports in teams consisting of 1-4 students.

### **Grading:**

Attendance & Participation:	10%
In-Class Exercises:	30%
Case Analysis Reports:	30%
Term Project Presentation:	10%
Term Project Report:	20%

### **Requirements:**

#### Attendance & Participation

Class attendance includes being in the class **on-time in each session**. It also **includes getting involved in the learning process** during class hours without distracting yourself or your classmates by activities such as having conversations, using your cell phones, tablets or laptops.

Class participation includes regular class attendance and getting involved in the learning process during class hours. **The non-verbal participation** requires being promptly in class and engagement via complying with classroom policies and conduct summarized on page 7 of the course 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. Actively responding to the questions in the synchronous lectures using zoom chat will be an important component while assessing your verbal participation.

Due to electricity or internet glitches, the students will be allowed to work offline on the assigned in-class class exercise during the class hours and the solutions of in-class exercises can be emailed to the instructor at the end of the synchronous class session. When such an electricity or internet glitch happens, the students are expected to immediately send a one-line email to the instructor (or a private message from zoom chat) to notify about the situation.

### In-Class Exercises

Several in-class exercises will be assigned during the two-hour sessions every Thursday and Friday. The in-class exercises can be of various forms such as zoom polls (true or false questions or multiple-choice questions), short answer questions on posted reading assignment (see page 3 of this syllabus) and assignments involving finding the solutions of posted quantitative questions. The students can write the answers of these questions on paper and take a picture to be uploaded to SUCourse+. Before uploading your solution, please make sure the photograph includes a clear picture of your solution. Some of these in-class exercises can be also related to the submitted case reports.

All in-class exercises will be graded. Some of the in-class exercises might be considered as quizzes while the remaining in-class exercises are not quizzes but means to enhance the learning of topics that were introduced to you in class. The in-class exercise grades will be finalized after checking the attendances of the students. Hence, students who have not attended the classes but have uploaded the in-class exercise solutions will be receive void points.

The in-class exercises will start with the first lecture. If you are not registered to the course and are planning to register during the add-drop period, please get in touch with the instructor before the lectures start in the first week. Unfortunately, no exemption will be given for the missed in-class exercises of the first two weeks due to registration status.

If students have missed any classes due to plausible reasons validated by health reports and the like, the students will be granted full grades for the missed in-class exercises as soon as the instructor receives the health report email from the Health Center. Please check your grades and inform the instructor if your grades are not reflected in SUCourse+ Gradebook.

### Case Analysis Reports

There will be six case analysis reports to be prepared as a team of 1-4 students. The teams should work to address the issues raised in the case questions and/or posted by the instructor, 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 handle the situation in each question, the results of their analysis, and the solution suggestions. Teams can consist of 1-4 students. The teams are allowed to change from one case to another. For each case, the members written on the title page of the case will be used.

## Term Project Report & Presentation

The term project will be done in teams of 1-4 students. The term project teams can be different from the case reports teams. Students will be provided two options for the term project. The first option involves analyzing the operations and supply chain of a real-life company. The second option involves writing a review of latest journal articles on a specific topic of operations and supply chain management.

The term project consists of two components; the term project presentation and the term project report. Both the term project and term project presentation are due to the first week of the final exams. The term project report and the power point slides of the presentation will be submitted on SUCourse+. The 8-10 minutes long term project presentation video recording or the google drive link of the recording will also be emailed to the instructor.

The term project report and presentation is due in the first week of the final exams period. The specific deadlines on other milestones of the term project will be posted over the course of the semester. The students will be expected to follow the corresponding announcement made in the lectures and read the corresponding posted sections on SUCourse+.

## Late Submission Policy

Late submissions will not be allowed for the in-class exercises. However, for the case analysis reports, term project presentations and term project reports only one-day lateness will 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 Excel files. Considering the guidelines provided to the faculty members, it is at the full discretion of the faculty member to make these interviews or not. The guidelines provided for the interview require the recording of the online interview. It is worthwhile to note that students should not feel stressed due to the possibility of the conduct of the interviews as in OPIM 301 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 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 BA in Management Program **values participatory learning**. Establishing the necessary social order for a **participatory learning environment requires that we all:**

- The students will be expected to attend the synchronous zoom lectures by logging into their SU accounts.
- We will start each fifty-minute class session on time.
  - Come to each class on time.
  - This also requires careful scheduling and execution of your activities during the break so as to ensure your on-time presence back in the class after the break.
- The students are not forced to open their cameras and microphones in OPIM 301 lectures and recitations. However, during the conduct of some in-class exercises in the form of quizzes, this might be requested. Please follow the instructions given during the class. In the case of non-compliance with this and other declared procedures, your grade will be void. Make sure to check that your webcam and microphone function properly.

### **Important Note Regarding the Synchronous Classes:**

Each student learns differently. Some of you have photographic memories and learn by seeing. While some of you remember things they hear and hence learn by hearing. Moreover, some of you might learn better by writing or doing. Hence, independent of your dominant way of learning, learning in even online synchronous lectures can be enhanced when all these three are combined by facilitating your seeing, hearing and writing/doing.

Hence, to incorporate writing/doing in OPIM 301 synchronous lectures in addition to the in-class exercises, the pre-lecture notes will be used. The pre-lecture notes will be posted on SUCourse+ one day before each session. Please download them and have them available in front of you (could be printed or opened on your tablet) so that you can follow the course better by filling in the blanks, doing the calculations and taking notes on them.

### **Important Note Regarding the Office Hours:**

As facilitating interaction with the students outside the classes is also important, virtual office hours with the instructor can be arranged by sending an email with your available times. Considering the instructor's schedule send your email early and by suggesting at least two different working days. As office hours will be arranged, no questions on the cases and term project will be answered via emails.

## Tentative Course Schedule:

---

<b>Week 1</b>	<b>Date:</b> 25-26 February 2021
	<b>Topic:</b> Course Introduction, Operations and Supply Chain Management
	<b>Requirement:</b> Read – Chapter 1 in CJ15
<hr/>	
<b>Week 2</b>	<b>Date:</b> 04-05 March 2021
	<b>Topic:</b> Strategy
	<b>Requirements:</b> Read – Chapter 2 in CJ15 <a href="#">Start working on Case 1 due 10 March 2021, Wednesday 17:00</a>
<hr/>	
<b>Week 3</b>	<b>Date:</b> 11-12 March 2021
	<b>Topic:</b> Manufacturing Processes and Facility Layout
	<b>Requirement:</b> Read – Chapters 7 and 8 in CJ15
<hr/>	
<b>Week 4</b>	<b>Date:</b> 18-19 March 2021
	<b>Topic:</b> Service Processes and Waiting Line Analysis and Simulation
	<b>Requirements:</b> Read – Chapters 9 and 10 (pages 221-239) in CJ15 <a href="#">Start working on Case 2 due 24 March 2021, Wednesday 17:00</a>
<hr/>	
<b>Week 5</b>	<b>Date:</b> 25-26 March 2021
	<b>Topic:</b> Waiting Line Analysis (Continued) & Process Design and Analysis
	<b>Requirement:</b> Read – Chapter 11 in CJ15
<hr/>	
<b>Week 6</b>	<b>Date:</b> 01-02 April 2021
	<b>Topic:</b> Process Design and Analysis (Continued)
	<b>Requirements:</b> Read – Chapter 11 in CJ15 <a href="#">Start working on Case 3 due 07 April 2021, Wednesday 17:00</a>
<hr/>	
<b>Week 7</b>	<b>Date:</b> 08-09 April 2021
	<b>Topic:</b> Six Sigma Quality & Statistical Process Control
	<b>Requirements:</b> Read – Chapter 12 in CJ15
<hr/>	
<b>Week 8</b>	<b>Date:</b> 15-16 April 2021, Friday
	<b>Topic:</b> Statistical Process Control (Continued)
	<b>Requirements:</b> Read – Chapter 13 in CJ15 <a href="#">Start working on Case 4 due 21 April 2021, Wednesday 17:00</a>
<hr/>	
<b>Week 9</b>	<b>Date:</b> 22 April 2021, Thursday (23 April 2021 No Class - National Holiday)
	<b>Topic:</b> Forecasting
	<b>Requirement:</b> Read – Chapter 18 in CJ15
<hr/>	
<b>Week 10</b>	<b>Date:</b> 29-30 April 2021
	<b>Topic:</b> Global Sourcing and Procurement
	<b>Requirements:</b> Read – Chapter 16 in CJ15 & <a href="#">Reading Assignment (see page 3)</a> <a href="#">Start working on Case 5 due 05 May 2021, Wednesday 17:00</a>
<hr/>	
<b>Week 11</b>	<b>Date:</b> 06-07 May 2021
	<b>Topic:</b> Inventory Management
	<b>Requirement:</b> Read – Chapter 20 in CJ15
<hr/>	
<b>Week 12</b>	<b>Date:</b> 13-14 May 2021 No Class – Religious Holiday
	<b>Requirement:</b> <a href="#">Start working on Case 6 due 21 May 2021, Friday 17:00</a>
<hr/>	
<b>Week 13</b>	<b>Date:</b> 20-21 May 2021
	<b>Topic:</b> Inventory Management (Continued)
	<b>Requirement:</b> Read – Chapter 20 in CJ15
<hr/>	
<b>Week 14</b>	<b>Date:</b> 27-28 May 2021
	<b>Topic:</b> Sales and Operations Planning & Ethics
	<b>Requirements:</b> Read – Chapter 19 in CJ15 <a href="#">Finish your term project report and term project presentation</a>

---