# ETM 594 Supply Chain Management

### **Spring 2021**

Instructor: Taner Bilgic (taner@boun.edu.tr) (212) 359 7078

**Course schedule**: Tuesday, 7-10 pm

**Delivery mode** Online

**Course web page** <a href="https://moodle.boun.edu.tr/">https://moodle.boun.edu.tr/</a> (enrolment is automatic through BUIS)

**Overview:** Recently, emphasis in competitive advantage shifted from a firm focused perspective to supply chains. This course is designed to introduce concepts in design, planning and control of such supply chains. Inventory management is at the core of this course together with network design, distribution strategies, information sharing, coordination, pricing and revenue management. The course is augmented with case studies and simulations to facilitate discussion and to gain a deeper understanding of basic principles.

## **Course Learning Outcomes:**

At the end of the course, you will be able to:

- a) Identify the fundamental trade-offs in supply chain design and analysis
- b) Resolve basic trade-offs using models, techniques, tools and data
- c) Evaluate alternative supply chain scenarios and make a recommendation

**Prerequisites:** A basic course in probability and statistics.

#### **Grading:**

Three Quizzes (Online 30%)

Paper assignments/Case Studies/Assignments (off-line 40%)

Final (Online\* 30%)

(\*)If it is going to be possible to hold in-class exams, we will let you know. .

**Textbook:** S. Chopra, *Supply Chain Management: Strategy, Planning, and Operation*, 7th Edition, Pearson, 2018

Lecture notes will be available on Moodle.

### **References:**

D. Simchi-Levi, P. Kaminsky, E. Simchi-Levi, *Designing and Managing the Supply Chain*, McGraw Hill, 4<sup>th</sup> Edition, 2019.

G. Cachon, C. Terwiesch, *Matching Supply with Demand: An Introduction to Operations Management*, 3<sup>rd</sup> Edition, McGraw-Hill, 2012.

#### **Course Content:**

- 1 Introduction
- 2 Supply Chain Network Design
- 3 Demand Forecasting and S&OP
- 4 Inventory Management
- 5 Supply Contracts-Coordination
- 6 Value of Information
- 7 Bullwhip Effect and the Beer Game
- 8 Cooperation and Alliances
- 9 Pricing and Revenue Management
- 10 Information Technology and Decision Support Systems for SCM

# **Course Format and Learning Environment:**

During Spring 2021, the course is offered as an online course. Delivery will be via live Zoom sessions and pre-recorded videos. Information about attending live sessions and all course material are available on Moodle.

Class sessions will be a mix of traditional lectures, class discussions, case analyses, simulation games, student presentations and learning activities that involve all students, either individually or in teams. It is imperative that students come prepared to class and are fully engaged in our class meeting.

The instructor welcomes your questions during class and outside the classroom. I encourage you to take advantage of the regular office hours listed above. If they do not fit your schedule, please make an appointment.

# **Group Assignments:**

You are required to work on cases and simulation games in teams of two or three students. Groups should be formed at the beginning of the semester and maintained throughout the semester.

**Teamwork:** The team requirement is to simulate the collaborative work environment you will encounter in your professional careers. By working in teams, you should be able to learn more and submit a higher quality report. If instead, you find that teamwork is a burden or you are learning less, chances are your (or your team's) approach needs adjustment. Common mistakes include: assuming you do not have to contribute to every report, coming to team meetings unprepared, not having a specific agenda for a meeting, and not having a process for all team members to participate.

**Peer Evaluations:** To make sure that all members of your team receive a fair grade, you will be asked to assess their contribution to the team. There will be a peer evaluation associated with each of the assignments. Each peer evaluation will be due a day after the assignment is due. In each peer evaluation, you will be asked to evaluate all your team members' contribution to the group project. These responses will be kept completely anonymous and confidential. Your evaluation by your team members will be used to adjust your group assignment scores. If you do not submit your peer evaluation on time, it will be assumed that you consider that all team members contributed equally towards the work. Please contact me if you need any help. Further information regarding these group assignments will be posted on the course website and discussed in class.