

### COURSE SYLLABUS

Course Code	: <b>IE 560</b>	Semester	: <b>Fall' 2022</b>
Course Title	: <b>Supply Chain Management</b>	Groups (Sections)	: 01
Prerequisites	: Consent of the Instructor	Type of Course	: Elective
Credit	: 3	ECTS	: 7.5

Instructor	: Ferda Can ÇETINKAYA Professor B.S., M.S., Ph.D. in Industrial Engineering	Lecture Hours	: Tuesday 18:00 – 18:50 19:00 – 19:50 20:00 – 20:50
Office	: Dept. of Ind. Eng., Faculty of Engineering Main Campus, Block L, 3 <sup>rd</sup> Floor, Room 317	Classroom	: Balgat Campus, A-321
Office Tel	: +90 – 312 – 233 13 64	Office Hour	: To be announced later; Appointments are also accepted.
E-mail	: <a href="mailto:cetinkaya@cankaya.edu.tr">cetinkaya@cankaya.edu.tr</a>		

**Catalog Data:** This course covers main elements of supply chain management with emphasis on quantitative models for integrating procurement, operations, and logistics. Definition of supply chain; planning models to aid in designing supply chain networks; planning demand and supply including models for forecasting, aggregate planning, sales and operations planning and coordination; commonly used inventory models and their management; designing and planning of transportation networks; managing cross-functional drivers including sourcing decisions, pricing and revenue management, information technology and sustainability.

**Learning Outcomes:** On successful completion of this course unit, students/learners will or will be able to:

- Have an understanding of the impact of supply chain management on the efficiency of systems
- Develop skills in using concepts and quantitative models in solving supply chain management problems
- Have improved their written communication skills
- Have improved their oral communication skills
- Have improved their teamwork skills
- Be aware of ethical issues

**Textbook:** There is no specific textbook for the course. Parts of the following book and some selected articles will be used.  
Chopra, S., and P. Meindl, *Supply Chain Management: Strategy, Planning, and Operation*, Prentice-Hall, 2013.

**Course Web Site:** Course related materials including the lecture notes, case study and homework assignments, exam evaluation results, and announcements will be uploaded to the webonline site of the course on the link <http://webonline.cankaya.edu.tr> so that they can be reached at any time.

**Lectures:** In lectures, the instructor will discuss only selected important concepts and points. To be familiar with the material presented in lectures and participate in class discussions, students are expected to read the material covered in the previous lectures prior to the new class meeting. If the students come prepared, then they will find the lectures more interesting, and will benefit from the discussion.

**Lecture Notes:** Lecture notes and some extra material will be uploaded to the course webonline site before the lectures to give the chance to the students to take extra notes on the lecture notes.

**Assignments:** There will be **three types of assignments**: Reading, Homework, and Case Study.

**Reading Assignments:** From time to time, there will be some reading assignments, which are mainly from journal articles supporting the lectures. For any type of examination, students are also responsible from studying all assigned readings, even if they might not be discussed in class.

**Homework Assignments:** In this course, homework assignments play crucial role in ensuring students from understanding of the material that they have learned in lectures. Some details are as follows:

- There will be **two** homework assignments based on lecture notes and reading assignments.
- **Each student should study individually** for doing the homework assignments.
- The assignment reports should be as professional in appearance.
- There will be no makeup for the homework assignments.
- It is expected that each student will submit an original report, which reflects only his/her effort. Homework study should be the student's independent work which requires independent thought. If some students work together or one student derives the answer and then share that answer with other students is not an independent work. Likewise, if two students work alone to derive their answers, compare them and find their mistakes, and then correct them together is not an independent work.
- **Each student** should upload the homework report to the weonline site of the course *on or before* the due date and time of the assignment.
- **Late submissions** of the homework reports will not be accepted.
- There will be **no makeup for the homework assignments**.
- Other details regarding the homework assignments will be given later.

Case Study:

There will be a case study, which involves the detail investigation of a problem in a supply chain environment, development and solving a mathematical programming model for this problem by GAMS. Some details are as follows:

- Case study will be assigned by the instructor.
- For the case study assignment, students should **work in teams with three** members.
- It is the student's responsibility to find his/her team members.
- The composition of the teams **cannot be changed** throughout the semester. That is, if a team member wants to leave his/her study team for any reason, then he/she is **neither** allowed to join into another team **nor** work alone.
- Each study team should fill out a **single copy** of the **Info Form of the Case Study Team**, which can be downloaded from the course's weonline site, on which the student number, name and surname, cellular phone number and e-mail of the team members are complete. Incomplete forms are not accepted.
- **If a student cannot find team members**, he/she should submit a form with his/her name only. Then, it will be assumed that he/she accepts to be assigned to a team by the instructor.
- **If two students form a team but could not able to find the third member**, they should submit a form with their names only. Then, it will be assumed that they accept that a third member will be assigned to their team or they can be assigned to different teams by the instructor.
- By **October 19, 2022 (Wednesday); 23:30**, the electronic file (with the **extension doc or docx**) of the **Info Form of a Case Study Team** should be uploaded to the weonline site of the course **by each member of the study team** to confirm their membership in the study team.
- Each team should prepare a **single written report** for the case study assignment in accordance with the technical report writing specifications.
- **If a team member does not participate in the study of the case study assignment**, then the other members in the team have the rights not to write his/her name on the case study report. Thus, this student's grade from the case study assignment will be zero.
- It is expected that each team will submit an original report, which reflects only the effort of team members. Case study should be the teams' independent work which requires independent thought. If the members of different teams work together or one team derive the answer and then share that answer with other teams is not an independent work. Likewise, if two teams work alone to derive their answers, compare them and find their mistakes, and then correct them together is not an independent work.
- **One of the students in each team** should upload the case study report to the weonline site of the course *on or before* the due date and time of the assignment.
- **Late submissions** of the case study reports will not be accepted.
- There will be **no makeup for the case study assignment**.
- In the last week of the semester, each case study team should give an **oral presentation** of the case study in front of his/her peers and instructor.
- Each student in a team is expected to participate in the oral presentation.
- Other details regarding the case study assignment will be given later.

Exams: There will be one midterm exam and the final exam.

- Both exams will be held in a classroom at Balgat Campus.
- Both exams will be open-notes & closed-book type.
- Final exam will be **non-cumulative** (i.e., it covers only the material studied after the midterm exam), and will be scheduled for a day and time in the designated final exams week.

- **To discourage last minute cramming, the instructor will not answer any question from students on one day before or on the day of an exam.**
- During the exams,
  - Students will not be allowed to go out for any purpose (visiting WC, drinking, smoking, etc.). So, they should take all necessary precautions before coming to the exam, and may bring their water, biscuits, etc.
  - Students will not be allowed to ask any question.
  - Students may need a hand-calculator.

Computer Usage: Homework assignments and the case study assignment may require the use of

- the optimization software package GAMS for solving linear or integer programming models and
- some tools of Microsoft Office such as Word, Excel and Powerpoint.

It is the students' responsibility to learn how to use these software packages.

#### Announcements &

Uploads: It is the students' responsibility to regularly check their university e-mail accounts and the webonline site of the course for announcements and updates.

Attendance: Students are expected to attend all lectures. Regular class attendance is not a sufficient condition for effective learning and success in this course. However, those students who attend lectures and study regularly are likely to benefit greatly and receive marks accordingly. Some other information regarding the attendance is as follows:

- Attendance will be taken every lecture hour, due to the requirement of the University's rules and regulations.
- **Minimum attendance should be 60%.**
- **If the attendance is less than 60% in lectures or recitation hours,** the semester letter grade will be NA when **the overall grade is below CC.**
- During every lecture hour, students are responsible to remind the instructor for taking the attendance, and sign the attendance sheet.
- Students' attendance records will be kept by the instructor and uploaded to the webonline site of the course.

Class participation: Class participation does not mean class attendance. Students are expected to intelligently participate in class discussions.

Academic Misconduct: Academic integrity is expected of all students of Çankaya University at all times, whether in the presence or absence of members of the faculty. No collaboration of any kind is permitted during the exams. All suspected cases will be treated according to the University's rules and regulations.

Grading Policy: Although the student's overall grade will be based on the general assessment of the instructor, the following percentages may give an idea about the relative importance of various assessment tools.

Assessment Item		Marked Out of	Weight (%)
2 Homework Assignments		100	20
Case Study	Report	100	15
	Oral Presentation	100	5
Midterm Exam		100	30
Final Exam		100	30
TOTAL			100

Note that the instructor reserves the right to modify these percentages in case he deems it necessary.

In general, semester letter grades will be assigned using the standard scales below. However, depending on the performance of the class, semester letter grades may be curved accordingly.

Letter grade	Coefficient	Score Intervals
AA	4.00	90-100
BA	3.50	85-89
BB	3.00	80-84
CB	2.50	70-79
CC	2.00	60-69
DC	1.50	50-59
DD	1.00	45-49
FD	0.50	35-44
FF	0.00	0-34

Semester letter grades will be announced by the Registrar's Office.

Grade Improvement: The grade for the course will only be based on the required work listed above and cannot be improved with additional work.

Objections: Any form of document concerning work, which is to be used by the instructor as the basis of grading, will be shown to the student upon request. Students, who feel strongly that they have received grades that are improper, have the right of formal appeal. The objection to any grade must be made to the instructor within 10 days following the announcement of the grades.

Course Evaluations: Çankaya University is committed to continuous improvement, and seeks students' input to that process through their participation in course evaluation process. Your response will be processed so that, unless you wish otherwise, the course instructor will not be aware of your identity. Please help us to help our future students by providing feedback on your experiences in this course. In addition to the end of semester evaluation, you may also provide your feedback at any time during the semester by writing (or typing) your comments on a small piece of paper without indicating your identity and sliding this paper under the door of the instructor's office.

Important Notes:

1. Please keep this course syllabus for future reference as it contains important information. It will also be available in the webonline site of the course and the department's web site.
2. You are responsible to know any changes to this course syllabus announced in lectures or through the webonline during the semester.
3. If you have any question on the coursework, please always refer to this syllabus to obtain the answer yourself first. If the answer is in the syllabus, then please do not insist on asking the same question to your instructor.