

IE 460 – Quantitative Models of Supply Chain
Bilkent University, Department of Industrial Engineering,
Spring 2019

Information on the Term paper/project (20%) – Groups of 3 students

Term paper requirement aims at investigating your ability to concentrate on an issue regarding supply chains. The term paper requires that you go beyond the material covered in class and can be considered as a tool to test your life-long learning abilities. It is important that you formulate a report from scratch and convey ideas clearly, as well.

The students are required to work in groups of three. The following are possible topics; however this list is not restrictive; it is only for illustration:

- (1) Analyze an existing supply chain or logistics practice in industry such as Vendor managed inventory (VMI), third party logistics (3PL), cross docking, direct shipment,
- (2) Survey of supply chain software,
- (3) Supply chain issues in a specific industry (Household appliances, Retailing, Clothing, etc.).
- (4) A quantitative extension of a model.
- (5) A review of research literature on a topic covered in class,
- (6) Development and Solution of a Case Study
- (7) Any topic that you will propose related to the course. We are open to new ideas.**

In each final-report, the following are expected:

- An executive summary no longer than 400-500 words
- Write at least two paragraphs on a separate sheet indicating the connections to the IE460 course material.
- Reference list, cited properly and listed properly.
- The text should be written as a report that includes purpose, conclusions, and at least one of the following when applicable: A description of the industry; its fundamental elements and how it fits in the overall supply chain; major benefits of the practice; major risks and costs of the practice; fundamental issues in design and implementation; specific industries or companies that the practice is suitable for; the companies and industries that the practice does not or will not work; examples of companies (in the World and in Turkey) that have benefited from the practice (with their stories); examples of companies that failed to implement the practice and reasons for failure; etc.
- There is no page limitation on the final-report; you are expected to use appendix (with organized contents), as well.

It is part of the honor code that you explicitly identify and refer to all external sources that you use in your term paper. This includes WEB sources that you use. Do not forget that plagiarism is being dishonest and brings disciplinary actions. In all your reports, you are expected to adhere with the technical report writing conventions.

The following are important dates for your work:

Due-date (0): March 04, Monday, 17:30 - Please send members of your group via e-mail to TA, and me as well as carbon copying the message to each member in the group. Those who have not done this on-time will have groups assigned by the instructor.

Due-date (1): Tuesday, April 02, 2019, start of the lecture – Two 1-2 page proposals on your alternative topics; what you are planning to do. Bring at least **two references for each** proposal at this stage that you think will play a significant role in your report. We'll finalize and write you back with e-mail your topic either by selecting one of your topics or suggesting a new one utilizing proposals. Please send your proposals via e-mail, and we'll respond you with e-mail. **If you fail to submit your proposals on time, 30 % of the weight of term paper will be lost.** Additionally, you will not be able to get any additional feedback from us during the progress of your term paper.

Due-date (2): May 02, 2019, 15:40 p.m. lecture time – You'll report your progress in class to us in 5 minutes. **If you fail to be in class, 10 % of the weight of term paper will be lost.** Additionally, you will not be able to get any additional feedback.

Due-date (3): May 17, 2019, (hard copy – to the HW box) – Final version of the term paper. (I would expect the total text would be around 15-20 double-spaced pages. However, you can have any size with use of appendix.)