

BUSINESS SCHOOL

Course Outline 2017 OPSMGT 371: BUSINESS LOGISTICS (15 POINTS)

Semester 1 (1173)

Course Prescription

Covers current issues in business logistics. Focuses on coordinating logistics across supply chains. Topic coverage features modelling using spreadsheets and includes transportation, forecasting, and inventory control models suitable for use in a distribution and supply chain context.

Programme and Course Advice

Prerequisite: OPSMGT 255 or STATS 255 or ENGSCI 255

Goals of the Course

The overarching objective of the course is to improve students' employability by helping them prepare to be useful for their future employers "from day one". More specifically, the course is aiming to provide students with essential knowledge and skills (of basic quantitative modelling) to handle real-life problems in the area of logistics. The course is most useful if taken simultaneously or after the supply chain strategy (OPSMGT 370) and business analytics (INFOMGT 290) courses but before the supply chain coordination course (OPSMGT 376 "Strategic procurement").

Learning Outcomes

By the end of this course it is expected that the student will be able to:

- 1. understand interconnectedness of the decision areas in a supply chain;
- 2. understand the necessity of using and steps of developing models for business decision-making;
- 3. create a variety of spreadsheet models most commonly used for making best decisions in logistics and supply chain management; and
- 4. demonstrate creative thinking and analytical capabilities to solve typical supply chain problems.

Content Outline

The following topics will be covered (the sequence and timing as per the "Course schedule" on Canvas):

- 1. Introduction to business logistics
- 2. Optimisation modelling
- 3. Transportation planning
- 4. Network design
- 5. Demand forecasting
- 6. Inventory management
- 7. Aggregate planning

Learning and Teaching

- 1. The pedagogy of the course revolves around improving students' abilities to handle real-life problems, to create solutions as opposed to memorising the lessons taught in class or presented in the textbook: "... trying to learn from watching a professor lecturing [It's] like trying to lose weight by watching a professor exercising" (Dr. Sebastian Thrun). Most of the class time is devoted to students' "hands-on" learning, specifically to developing models in MS Excel.
- 2. Students interested in more practice (and bonus marks) have an option and are encouraged to do a group assignment, which will provide more opportunity for indepth thinking and for applying lessons/techniques learned in class.
- 3. It is expected that a student studying according to the lecturer's recommendations, in particular, investing about five hours every week into studying for the course outside of the class, will get the letter grade of "B" or above.

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Learning Resources

The recommended textbook for this course is: Chopra S., and Meindl P. (2016) *Supply Chain Management: Strategy, Planning, and Operations* (6th Ed.). Pearson Education. Other course materials will be posted on Canvas and/or handed out in class. There is no course book; students are advised to use binders.

All the course-related information is available on Canvas. Several course-wide announcements will be made in class and/or posted on Canvas over the semester. A copy of any announcement is usually sent to students' registered email address. Checking "Announcements" module on Canvas regularly, and reading course-related emails carefully will keep students updated about the course.

Assessment

Item	Туре	Weight
Lab tests*	individual	40%
Individual assignment	individual	20%
Final exam	individual	40%
Total		100%
Group assignment**	group	10% (bonus)
Several lab exercises	not marked	

^{*} Two tests take place in the lab (time and rooms) and are equally weighted with 20% each. Details of timing are available in the "Course schedule" on Canvas.

^{**} This is a simulation-based online game that students play in groups in a 1-2 hour session, and their results (together with their short written report) will be assessed as bonus marks.

Learning Outcome	Lab Tests	Individual Assignment	Final Exam	Lab Exercises	Group Assignment
1	Χ	Χ	Χ	Χ	
2	Χ	Х	Χ	Χ	
3	Х	Х	Х	Х	Х
4		Х		Х	Х

Student Feedback

Students are welcome to discuss privately any impairment-related requirements face-to-face and/or in written form with the course lecturer and/or tutor. Also, at the end of the course:

- 1. Students may be asked to express their satisfaction with the course by filling out evaluation forms.
- 2. Students are encouraged to share any information that they believe is relevant for making them more competitive on the job market.