# Logistics and operations management

## Prof. Valeria Belvedere; Prof. Michele Palumbo

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims at outlining the contribution of logistics and operations management to corporate competitiveness. Students will learn how and why the design of the product itself and of its production and distribution process can drive such performances as productivity, quality, speed, flexibility and cost-effectiveness. They will be instructed on how to carry out an assessment of processes’ current performance and to identify improvement priorities. Lastly, the course will address the most relevant best practices suitable for achieving improvement targets.

At the end of the course students will be:

* familiar with the main concepts and theories concerning logistics and operations management;
* able to analyze logistics and manufacturing processes through the frameworks and concepts learnt during the course;
* able to solve managerial problems in the context of logistics and operations management, collecting relevant data, analyzing it through the concepts and theories addressed during this course and providing insights on the ethical aspects of the problem under analysis;
* able to communicate in a clear and effective way their knowledge, ideas and improvement suggestions to both managers and novices of this field;
* able to keep on learning the topics of logistics and operations management, widening their knowledge and understanding of this subject through the reading of further materials and the real-life experience in challenging contexts.

***COURSE CONTENTS***

* The strategic role of Innovation and Operations in manufacturing and service companies;
* Production processes’ typologies.
* Overview of the design decisions of an operating system;
* Process analysis in manufacturing processes;
* Performance measurement in manufacturing companies;
* Social and environmental sustainability in manufacturing companies;
* Supply Chain Management evolution;
* Effective and efficient distribution assets: Service Level and Total Logistics Cost;
* Stock management in concrete warehousing and handling solutions;
* Make or buy choices referred to logistics: tertiarization, outsourcing and strategic partnership;
* Transportation: pricing, contract management, pre-invoicing and supplier choice;
* Strategic approach to Procurement Sourcing and Supplier Management.

***READING LIST[[1]](#footnote-1)***

*Attending students*

All materials uploaded on Blackboard will be considered mandatory.

Slack N., Brandon-Jones A. (2019), *Operations Management – 9th edition,* Pearson. (selected chapters)

*Non attending students*

Slack N., Brandon-Jones A. (2019), *Operations Management – 9th edition,* Pearson. (all chapters)

***TEACHING METHOD***

The teaching method will be interactive. For each core topic of the course a case-study or a simulation will be used, according to a “learning by doing” approach.

***ASSESSMENT METHOD AND CRITERIA***

Attending students will be assessed though a final written exam which will consist of 20 multiplechoice questions (1 point each) and 1 numerical exercise (10 points).

The exam as an attending student can be taken in the first two dates after the end of the course.

Non attending students will be assessed through a written exam consisting of multiple choice and open questions, referred to the entire textbook. All questions will be theoretical. No exercise or mini-case will be present in the exam.

At the end of the course, a mock-exam will be uploaded on Blackboard.

***NOTES AND PREREQUISITES***

The course will be taught in English.

In case the current Covid-19 health emergency does not allow frontal teaching, remote teaching will be carried out following procedures that will be promptly notified to students.

1. I testi indicati nella bibliografia sono acquistabili presso le librerie di Ateneo; è possibile acquistarli anche presso altri rivenditori. [↑](#footnote-ref-1)