# Operations and Supply Chain Management

## Prof. Viviana D’Angelo

***COURSE AIMS AND EXPECTED 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;
* Total Quality Management;
* Lean Manufacturing approach;
* Supply Chain Management evolution;
* Stock management in concrete warehousing and handling solutions;
* Transportation: pricing, contract management, pre-invoicing and supplier choice;
* Strategic approach to Procurement Sourcing and Supplier Management.

***READING LIST***

***Attending students***

* All the materials uploaded on Blackboard (slides, cases, additional readings) will be considered mandatory.
* Slack and Brandon-Jones, *Operations Management*, Pearson, 9th edition pr 7th edition (only selected chapters):

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| **Slack and Brandon-Jones, Operations Management 9th edition** | **Slack and Brandon-Jones, Operations Management 7th edition** |
| 1 – Operations management  2 – Operations performance  3 – Operations strategy  4 – Managing product and service innovation  6 – Process design  7 – The layout and look of facilities  10 – Planning and control  12 – Supply chain management  13 – Inventory management  16 – Operations improvement  17 – Quality management  17 (supplement) – Statistical process control | 1 – Operations management  2 – Operations performance  3 – Operations strategy  4 – Process design  5 – Innovation and design in services and products  7 – Layout and flow  10 – The nature of planning and control  12 – Inventory management  13 – Supply chain management  17 – Quality management  17 (supplement) – Statistical process control  18 – Operations improvement |

***TEACHING METHOD***

Each lesson would be made of theory and practice. 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***

Students will be assessed through a final written exam lasting 90 minutes, consisting of 15 open-ended questions (2 point each), for a total of 30 points.

***NOTES AND PREREQUISITES***

Attending classes is hughly recommended.

Prerequisites: students are expected to attend the economics and marketing courses included in their degree programme that take place before the beginning of this course.

***OFFIICE HOURS***

On request, send an email to viviana.dangelo@unicatt.it