



**UNIVERSITÉ
DE NAMUR**

FACULTÉ
DES SCIENCES ÉCONOMIQUES,
SOCIALES ET DE GESTION

Operations Management (EGESB332)

Academic Year: 2014-15

Instructor: Aadhaar Chaturvedi

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Credits: 3 ECTS

Learning Goals

Effective Oral Communication

Each student shall be able to communicate verbally in an organized, clear, and persuasive manner, and be a responsive listener. Assessment: class participation

Critical and Integrative Thinking

Each student shall be able to identify key issues in a business setting, develop a perspective that is supported with relevant information and integrative thinking, to draw and assess conclusions. Assessment: class participation, case reports, final exam

Course Description:

This course provides a general introduction to operations management. Operations Management studies the process by which inputs of materials, labor, capital and information are transformed into products and services which the consumers are willing to pay for. These processes can be managed well or poorly. Knowledge introduced in this course will help you understand the reasons for both.

The main objective of this course is to introduce tools and techniques that are needed to understand operations and supply chain processes and to provide students with the ability to analyze and continuously improve these processes.

Reference Textbook:



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Operations and Supply Chain Management, 13th edition, by F. Robert Jacobs and Richard B. Chase

Session-Wise Topics:

1. Introduction to Operations Management: Objective and challenges in Operations Management. Introduction to manufacturing processes
2. Basics of Process Flows: Bottleneck analysis, capacity planning.
3. Little's law and inventory build-up: Application of little's law and inventory build-up diagrams
4. Capacity analysis: Cost of waiting and determining capacity of processes.
5. Introduction to Queueing Theory
6. Application of Queueing theory: Cost of waiting with random arrivals and service times
7. Project planning: Critical Path Method
8. Inventory management: Introduction to inventory management and economic order quantity model
9. Safety-stock: Fixed order quantity and periodic review inventory models
10. Newsvendor model: Introduction and application of newsvendor's model
11. Beergame (simulation): Order fluctuations in supply chains
12. Bullwhip effect: Cause of order fluctuations in supply chains
13. Final review: Question and answers
14. Mock exam

Course Material: Course pack is available before the course



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Homework

A total of 4 assignments will be handed out at the end of sessions 1,3,5 and 7. The questions for each homework will be posted online on the course website on Webcampus.

Evaluation Components:

The course grade will be based on 7 group homework (30%), individual class participation (20%) and an in-class individual final exam (50%).