Module: Production and Operations

Department: Finance

Status: Common

Credits: 10

Level 4 – Year 2

Pre-Requisites: Organisational Behaviour

run by ESCOEX International Business School, Business & Finance, Business & Marketing

Organiser: María Núñez Zamorano

Overall Aims and Purpose

The overall purpose of this module is to provide the students with the practical-theoretical knowledge and technical tools necessary so that they may make decisions regarding processes, products-services, location, quality etc..., and always from the point of view of the director of production and operations.

Learning Outcomes

On successful completion of this module, the student will be able to:

- 1. Understand the importance of the management of operations and its contribution to the achievement of objectives. Dominate the strategy of operations and their implementation in real cases.
- 2. Understand and use the different modules for decision making that influence the operations of a company. Dominate the tactics of operations and solve real situations.
- 3. Use the tools and techniques for decision-making and understand the basics and implications of each of them.

Indicative Content

Strategic Decisions:

- 1. Introduction to Production/Operation systems
- 2. Process of Analysis
- 3. Product and service design
- 4. Quality administration
- 5. Factory distribution
- 6. Capacity planning
- 7. Placement

Tactical Decisions:

- 1. Programming operations
- 2. Aggregated planning
- 3. Classic stock management. Independent demand
- 4. Planning material needs
- 5. Just in time production

Assessment Methods

1 mid term exam worth 30%

1 final exam worth 40%

I group assignment worth 30%. In groups of 2-3 students. Written document with minimum 5000 words 15%, oral presentation 10% each and 5% peer assessment.

Teaching and Learning Strategy

The methodology for this module is based on the theoretical knowledge of the program derived from the

essential reading manuals. This theoretical knowledge will be applied through the study of cases and practical exercises to encourage participation of the students.

Key Skills Taught

D1: Communication and presentation skills including audio, oral and written, using a range of methods D3: Interactive and group skills including team projects and presentations; leadership, team building, influencing and project management skills together with skills of effective listening, negotiating, persuasion and presentation

D4: Problem solving skills including identifying, formulating and solving business problems; the ability to create, evaluate and assess a range of options, together with the capacity to apply ideas and knowledge to a range of situations

D5: The ability to self-appraise and reflect on practice including the development of skills associated with critical reflection

Indicative Reading

Essential Reading:

- Heizer, Jay H; Render, Barry (2007), *Dirección de la producción y de operaciones: decisiones estratégicas*, Prentice Hall, cop. 8a ed. Madrid
- Heizer, Jay H; Render, Barry (2007), *Dirección de la producción y de operaciones: decisiones tácticas*, Prentice Hall, cop. 8a ed. Madrid

Recommended Reading

- Domínguez Machuca, J. A. (2002), Dirección de operaciones: aspectos tácticos y operativos en la producción y los servicios, McGraw-Hill, cop., Madrid
- Domínguez Machuca, J. A. (2005), Dirección de operaciones: aspectos estratégicos en la producción y los servicios, McGraw-Hill, Madrid
- Martín Peña, M.L. (Coord.) & Others (2001), Production Management: Problems and exercises, Prentice Hall Iberia, Madrid

Websites: www.apics.org, www.informs.org