Course Title : Operations Management

Course Code : BUS211/BUS2211

Recommended Study Year: Year 2 / Year 3

No. of Credits/Term : 3

Mode of Tuition : Sectional Approach

Class Contact Hours : 3 hours per week

Category in Major Prog. : Functional Core

Prerequisite(s) : BUS102/BUS1102 Statistics for Business

Brief Course Description

Operations Management is the management of processes or systems that transform inputs into finished goods and/or provide services. Over the past decades, many firms have learned the painful lessons that neglect of the operations function can be extremely hazardous to the health of the organization. It has been demonstrated that operations management becomes a primary function of a firm, and plays an important role in effectively improving the firm's performance and competitiveness. This course provides an overview of operations management in both the manufacturing and service industries.

<u>Aims</u>

This course is designed to help students understand the principles, concepts, and techniques that are applied to the design, planning, control, and improvement of manufacturing and service operations systems.

Learning Outcomes

Upon completion of the course, students should have a full understanding of the principles, concepts, and techniques in operations management, and use the quantitative and qualitative tools to analyze basic operations-related issues. Specifically, students will be able to

- 1. understand the basic role of the operations function in business organizations and its interdependence with other key functions;
- 2. understand how operations strategy is used to support the business strategy and to obtain a sustainable competitive advantage;
- 3. understand the key decisions and trade-offs involved in effectively managing manufacturing and service operations;
- 4. apply basic technical and analytical skills to identify, formulate, and solve operations management problems.

Measurement of Learning Outcomes

1. Problem-based individual assignments are used to facilitate and evaluate students'

- understanding of principles, concepts, and techniques of operations management.
- 2. A midterm test and a final examination are used to assess students' comprehension of operations management.

Indicative Content

This course covers the following topics:

- 1. Introduction to Operations Management;
- 2. Competitiveness, Strategy and Productivity;
- 3. Process Selection and Facility Layout;
- 4. Management of Quality;
- 5. Statistical Process Control;
- 6. Inventory Management;
- 7. Capacity Planning, Aggregate Planning and Master Scheduling Process;
- 8. Material Requirement Planning;
- 9. Scheduling;
- 10. Supply Chain Management

Teaching Method

The instructor uses lectures to introduce the basic concepts and techniques commonly used in operations management. The instructor provides in class sufficient practical examples to help students better understand how to use the knowledge and skills for the analysis and control of operations processes and systems. Moreover, the instructor also applies the computer software (e.g., MS Excel) to the quantitative analysis of operating processes.

Assessment

Total	100%
Final Examination	55%
Midterm Test	25%
Assignments	15%
Class Participation	5%

Required/Essential Readings

William J. Stevenson, Operations Management, Asia Global Edition, McGrawHill.

Jay Heizer, Barry Render, Operations Management, 9th ed., Pearson.

Recommended/Supplementary Readings

- 1. J. Heizer and B. Render, *Operations Management*, 10th Ed., Pearson Prentice Hall, 2011
- 2. J. Heizer and B. Render, *Principles of Operations Management*, 7th Ed., Pearson Prentice Hall, 2008.
- 3. W. V. Gehrlein, Operations Management Cases, McGraw-Hill, 2005.

- 4. R. Johnston, S. Chambers, C. Harland, A. Harrison and N. Slack, *Cases in Operations Management*, 3rd Ed., Prentice Hall, 2003.
- 5. S. Chopra and P. Meindl, *Supply Chain Management: Strategy, Planning and Operation*, 4th Ed., Pearson Prentice Hall, 2010.
- 6. G. Cachon and C. Terwiesch, *Matching Supply with Demand: An Introduction to Operations Management*, McGraw-Hill, 2006.