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BUS 801

Operations Management
Course Guide

BUS 801 Operations Management Course Guide

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Introduction

BUS 801 Production and Operations Management (POM), is a one semester, two credit unit course. It is available to all BUS students in the School of Business and Human Resource Management.

The course consists of 20 study units, covering such general areas as introduction to Production and Operations Management, Design of Production Systems, Operating Decisions. The material has been carefully developed to serve as an introductory text for students just coming in contact with POM for the first time.

This Course Guide tells you briefly with the course is about, relevant texts to consult, and how you can work your way through these materials. It also contains some guidelines on your tutor-marked assignments.

What You Will Learn in This Course

The major aim of BUS 801: Production and Operations Management (POM) is to introduce you to the field of production and Operations Management. The field of POM is dynamic, and very much a part of many of the good things that are happening in business organizations.

Generally, the subject matter represents a blend of concepts from industrial engineering, cost accounting, general management, marketing, quantitative methods and statistics.

Production and Operations Management activities, such as forecasting, choosing a location for an office or plant, allocating resources, quality are core activities of most business organisations.

Course Aims

The course aims to give you a broad frame-work for the management of the operations functions of organizations, and how this is used in planning, coordinating, and executing all the necessary activities that create goods and services.

This will be achieved by aiming to:

- Introduce you to the principles and concepts of POM;
- Demonstrate how to determine an organisation's strategies and competitive priorities;
- Explain how managers make decisions about the type of work to be done in-house, the amount of automation to use, and methods of improving existing process;
- Explain the technologies to pursue and ways to provide leadership in technological change;
- Outline how to structure the organization, foster teamwork, the degree of specialization, or enlargement of the jobs created by the process, and methods of making time estimates for work requirement;
- Demonstrate how to coordinate the various parts of the internal and external supply chain, forecast demand, manage inventory and control output and staffing levels over time.

Course Objectives

In order to achieve the aims set out above, the course sets overall objectives. You will also realize that each course unit objectives are always included at the beginning of each unit. It is advisable to read through their specific objectives before studying through the unit.

The following are the broad objectives of the course. By striving to meet these objectives, you should have achieved the aims of the course as a whole.

On successful completion of the course, you should be able to:

1. Describe the nature and scope of POM and how it relates to other parts of the organization.
2. Understand the importance of operations function relative to the goals of a business organisation.
3. Appreciate why the entire business community is stressing quality.
4. Discuss the importance of product and service design.
5. Explain the need for management of technology.
6. Formulate a linear programming model from a description of a problem.
7. Explain the importance of work design.
8. Discuss and compare time study methods.
9. Explain the concept of a Learning Curve (LC) use LC take to making activity time projections.
10. Evaluate location alternatives.
11. Outline the steps in the forecasting process.
12. Demonstrate an understanding of the management of finished goods, raw materials, purchased parts and retail items.
13. Prepare aggregate plans and compute their costs.
14. Discuss the conditions under which Material Requirements Planning is most appropriate.
15. Outline the consideration important in a traditional mode of production to a Just-in-Time system.
16. Construct simple network diagrams.
17. Explain the importance of maintenance in production systems.

Working through This Course

It will be very essential that you thoroughly read the study units, consult the suggested texts and other relevant materials at your disposal. Most of the units contain self-assignment, which will be assessed by your tutor.

Course Materials

Major components of the course are:

Course Guide
Study units
Assignment File
Presentation schedule

Study Units

There are 20 study units in this course, which have been compartmentalized into four modules as follows:

Module 1

Unit 1 Production and Operations Management
Unit 2 Operations Strategy
Unit 3 Forecasting in Production and Operations Management
Unit 4 Process Management
Unit 5 Job Design

Module 2

Unit 1 Management of Technology
Unit 2 Site Selection
Unit 3 Supply Chain Management
Unit 4 Inventory Management
Unit 5 Aggregate Planning

Module 3

Unit 1 Linear Programming (LP)
Unit 2 Material Requirements Planning
Unit 3 Just-In-Time System
Unit 4 Project Management
Unit 5 Productivity

Module 4

Unit 1 Work Methods
Unit 2 Work Measurement
Unit 3 Learning Curves
Unit 4 Total Quality Management
Unit 5 Maintenance and Reliability

Textbooks and References

There are no compulsory books for the course. However, you are encouraged to consult some of those listed for further reading at the end of each unit.

Assessment

Your performance in this course will be based on two major approaches. First are the tutor-marked assignments (TMAs). The second method is through a written examination.

Tutor-Marked Assignments (TMAs)

With respect to TMAs, you are expected to apply the information, knowledge and techniques gathered during the course. The assignments must be submitted to your tutor for formal assessment in accordance with the laid down rules. The total secure obtained in the TMAs will account for 50% of your overall course mark.

There are many TMAs in the course. You should submit any eight to your tutor for assessment. The highest five of the eight assessments will be counted and this credited to your overall course mark.

Final Examination and Grading

At the end of the course, you will need to sit for a final written examination of three hours' duration. This examination will also count for 50% of your overall course mark. The examination will consist of questions, which reflect the types of self-testing, practice exercises and TMAs you have previously encountered. You are advised to prepare adequately for the examination. Since the general broad area of the course will be assessed.

Course Marking Scheme

The following table lays out how the actual course marking is broken down:

Assessment	**Marks**
Eight assignment Submitted	Best five marks of the eight count @ 10% each = 50% of course marks
Final Examination	50% of overall course marks.
TOTAL	100% of course marks.

How to Get the Most from This Course

The distance learning system of education is quite different from the traditional University system. Here, the study units replace the University lecturer, thus conferring unique advantages to you. For instance, you can read and work through specially designed study materials at your own pace, and at a time and place that suit you best. Hence, instead of listening to a lecturer, all you need to do is reading.

You should understand right from the on-set that the contents of the course are to be worked at, and understood step by step, and not to be read like a novel. The best way is to read a unit quickly in order to see the general run of the content and to re-read it carefully, making sure that the content is understood step by step. You should be prepared at this

stage to spend a very long time on some units that may look difficult. A paper and pencil is a piece of equipment in your reading.

Facilitators/Tutors and Tutorials

Detailed information about the number of tutorial contact hours provided in support of this course will be communicated to you. You will also be notified of the dates, times, and location of these tutorials, together with the name and phone number of your tutor as soon as you are allocated to a tutorial group.

Your tutor will mark and comment on your assignments. Keep a close watch on your progress and on any difficulties you might encounter, and provide assistance to you during the course.

Please do not hesitate to contact your tutor by telephone or e-mail if you need help. The following might be circumstances in which you would find help necessary:

- You do not understand any part of the study units.
- You have difficulty with the self-test or exercises.
- You have a question or problem with an assignment or with the grading of assignment.

You should endeavour to attend tutorial classes, since this is the only opportunity at your disposal to experience a physical and personal contact with your tutor, and to ask questions which are promptly answered. Before attending tutorial classes, you are advised to thoroughly go through the study units, and then prepare a question list.

This will afford you the opportunity of participating very actively in the discussions.

Summary

Management of the operations function is the focus of this course. Together with you, we explore the role of operations within the total organization. The explanation of what operations managers do, as well as some of the tools and concepts they use to support key business decisions are given.

At the end of the course, you will appreciate operations management as a competitive weapon, which is important to:

- Accounting, prepares financial and cost accounting information that aids operations managers in designing and operating production systems.

- Finance, which manages the cash flows and capital investment requirements that are created by the operations function.

- Human resources, which hired and trains employees to match process needs, location decisions, and planned production levels.

- Management information systems, which develops information systems and decision support systems for operations managers.

- Marketing, which helps create the demand that operations must satisfy, link customer demand with staffing and production plans, and keep the operations function focused on satisfying customers' needs.

- Operations, which designs and operates production systems to give the firm a sustainable competitive advantage.