

**HAILEY COLLEGE OF COMMERCE**

UNIVERSITY OF THE PUNJAB, LAHORE

Course Title: **Operations and Production Management**

Proposed Course Code: BSC-313

Credit Hours: 03

Program: BS Commerce

Semester: 6<sup>th</sup>**1.0 Introduction of the Course**

Operations management is about how organizations produce goods and services. Everything you wear, eat, sit on, use, read or knock about on the sports field comes to you courtesy of the operations managers who organized its production. Every book you borrow from the library, every treatment you receive at the hospital, every service you expect in the shops and every lecture you attend at university – all have been produced. While the people who supervised their ‘production’ may not always be called operations managers that is what they really are. And that is what this book is concerned with – the tasks, issues and decisions of those operations managers who have made the services and products on which we all depend.

**2.0 Pre-Requisites Course (s) or Other Requirements/Skills:**

The course requires the basic knowledge of the type of business organizations and their characteristics. Further, it requires an initial understanding of business and management.

**3.0 The Course carries following objectives:**

This course is an extension of the subject of management. It is a compulsory subject at the final level of the BS in Commerce Program. The following objectives are set for the course:

- i. The students should be able to understand the systems and the processes that produce goods and provide services.
- ii. The students should be able to form and work in teams to observe real-time operations and reveal the bottlenecks in the system.
- iii. The students should be able to demonstrate a higher level of understanding by integrating the theories, strategies, and models prevalent around the globe and integrate them into the local settings.

**4.0 Course Learning Outcomes**

After the completion of this course the students should be able to:

1. Understand the importance and the role of operations management to gain competitive advantage.
2. Use operations theories and tools to make them able to make better OM decisions as future managers.

**5.0 Course Contents:****Unit-I****Introduction**

Definition of Operations management.  
Nature and scope of Operations management.  
Types of Operations.  
Operations function.  
Primary functions of Operations management  
Traits of a Good Operations Manager  
Importance of Operations management  
Interaction of Operations with other functional areas of business.  
Operations Performance and Strategy

**1.1 Process Design**

What is process design?  
Process Types – the volume variety effect on process design

**1.2 Design of Products and Services**

Why is good design so important?  
Benefits of interactive design

**1.3 Supply Network Design**

The supply network perspective  
Factors influencing the Location of capacity  
Best possible choice of plant location  
Professional decision-making through weighted index

**1.4 Forecasting**

Knowing the Options  
Approaches to Forecasting

**1.5 Process Layout and Flow**

What is Layout?  
The basic layout types  
What type of layout should an operation choose?

**1.6 Job Design and Work Measurement**

What is Job design?  
Method Study in Job Design  
Techniques in Work Measurement

**1.7 Capacity Planning and Control**

What is capacity management?  
Capacity Planning --- The Queuing Theory

## Unit-II

### 2.2. Inventory Planning and Control

What is inventory?  
Advantages and disadvantages of holding inventory  
The volume decision  
The time decision

### 2.2. Supply Chain Planning and Control

What is supply chain management?  
The activities of supply chain management  
Types of relationships in supply chains

### 2.2. ERP and MRP

What is ERP?  
How did ERP develop?  
What is MRP?  
The Bills of Materials

### 2.2. Lean Synchronization

The Lean Philosophy of Operations Management  
The Techniques of Lean Management --- JIT System

### 2.2. Quality Management

What is Quality and why is it important?  
Components of Total Quality Management

### 2.2. Operations and Risk Management

What is Risk Management  
Assess the potential causes of risks from failure  
Preventing Failure occurring  
Mitigating the effects of failure  
Recovering from the effects of failure

### 2.2. Operations and the Corporate Social Responsibility

## 6.0 Teaching-Learning Strategies

- Class Lectures,
- Case Studies,
- Videos,
- Assignments,
- Presentations,
- Group discussions,
- Visits to the Industrial Units

**7.0 Assignments-** Types and Number with the calendar

Observe a business outlet near your home and evaluate the changes in the dynamics of supply chain after COVID-19	Week 3
Prepare a Weighted Index by choosing any service or manufacturing organization for Location Planning.	Week 5
Visit a drive-through quick-service restaurant and observe the operation for half an hour. You will probably need a stop watch to collect the relevant timing information. Consider the following questions. Where are the bottlenecks in the service (in other words, what seems to take the longest time)? How would you measure the efficiency of the process? What appear to be the key design principles that govern the effectiveness of this process?	Week 10
Visit any service outlet, observe the time it takes to complete the operation and apply Little's Law.	Week 14
Observe two services or products being offered by a single outlet and identify the order winners	Week 16

**8.0 Assessment and Examinations:** As per University Rules

<b>Mid-Term</b>	Written Paper
<b>Final Examination</b>	Written Paper
<b>Sessional</b>	Quizzes and Tests, Assignment and Presentations, Attendance, Class Participations and Discipline etc.

**9.0 Textbooks**

1. Johnston, N. S. S.C. "Operations Management" 6<sup>th</sup> Edition

**10. Suggested Readings****10.1 Books**

2. Stevenson, W. J. "Operations Management" 9<sup>th</sup> edition
3. Jay Heizer and Barry Render "Operations Management" 9<sup>th</sup> Edition

**10.2 Journal Articles/ Reports**

- ✚ Journal of Operations Management
- ✚ International Journal of Operations and Production Management
- ✚ International Journal of Quality and Reliability Management

**Websites:**

- ✚ The Association for Operations Management: <http://www.apics.org/default.htm>
- ✚ Institute of Operations Management (IOM): <http://www.iomnet.org.uk/>
- ✚ Manufacturing and Service Operations Management Society (MSOM), <http://msom.society.informs.org/>