

**UNIVERSITY OF MAURITIUS
MODULE SPECIFICATION SHEET**

1. GENERAL INFORMATION

Academic Year: 2009/2010
Semester(s): 1 & 2

Title	Code	Duration (hrs)	Nº of credits
OPERATIONS MANGEMENT 2	<u>MECH</u> <u>2009 y</u>	Lectures: 3	6
		Practicals: 0	
		Total: 3	

2. PRE-REQUISITE(S)/PRE-REQUIREMENT(S)

Mech 1007Y(1)

3. AIMS

The aim of any industrial, service, public sector or retail operation is to deliver goods and services of the quality, quantity, cost and availability that will satisfy the customers' needs while at the same time making most effective use of resources. This can only be achieved by giving attention to the design of products, processes and work for employees, and through the competent planning and control of operations. This course will introduce the fundamental principles of the subject of Operations Management which addresses these issues. As such, it is intended to assist in the management of any firm (industrial, service, public sector or retail) at the micro level of the economy.

4. OUTLINE SYLLABUS

- Inventory Management and Advanced Inventory Model
- Outsourcing and Purchasing
- MRPI ;MRPII
- Finite Scheduling and OPT
- ERP (Enterprise Resource Planning)
- Project Management
- Linear Programming Techniques
- Decision & Utility Theory
- JIT Systems, Queuing Theory
- Network Models

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- Dynamic programming
- Replacement Theory
- Sequencing and Goal programming
- Industrial Relations & Laws
- Industrial Disputes and Disciplines
- Contracts & Tendering.

5. LEARNING OUTCOMES

By going through the course you would be able to

- Simulate an awareness of the characteristics of operations systems and the various approaches that may be adopted in their design
- To equip individuals with an appreciation of techniques and technologies available for the control of operations
- Understand and appreciate the roles of operations management in the industry, at micro or macro level.

6. COORDINATORS:

	Programme Coordinator
	BSc Production and Operations Management Level 2
Name	DR H RAMASAWMY
Department	Mechanical and Production Engg Dept
Building	Fifth Floor Floor, Engg. Tower
Room Number	
Phone No.	403 7842
E-mail address	haree@uom.ac.mu
Consultation Time	Contact Coordinator

7. MODULE COORDINATOR and LECTURERS

	Module Coordinator & Lecturer	Lecturer
Name	DS CALLYCHURN	
Department	Mechanical & Prod Engg	
Building	Fifth Floor, Engg. Tower	
Room Number	5.6	
Phone No.	4037841	
E-mail address	d.callychurn@uom.ac.mu	
Consultation Time	12.00 hrs to 13.00 hrs	

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8. VENUE AND HOURS/WEEK

Hours/week: Two sessions of 1.5 hour each of lecture per week during both Semesters as follows

- Mondays 1030-1200
- Wednesdays 0900-1030

9. MODULE MAP

Week No	Topic
1	Course Introduction. Operations and Processes
2,3	Inventory Management and Advanced Inventory Model
4	Outsourcing and Purchasing
5	MRP1
6	MRP2
7	Enterprise Resource Planning
8	Scheduling and OPT
9,10	Project Management
11	Tutorial Session
12,13	Linear Programming Techniques
14	Decision and Utility
15	Assignment Presentation & Test
Semester 2	
1	JIT Systems
2,3	Queuing Theory
4	Network Models
5	Dynamic Programming
6	Sequencing and Goal Programming
7	Replacement Theory
8	Tutorial Session
9,10	Industrial Relations and Laws
11	Industrial Disputes and Disciplines
12	Contract & Tendering
13	Assignment Presentation & Test
14,15	Tutorials & Summing up

10. RECOMMENDED BOOKS/JOURNALS/WEBSITES

- Applied Production and Operations Management, James R. Evans
- Operations Research An Introduction, Hamdy A. Taha