



- 1. describe and contrast service and manufacturing operations;
- 2. describe information and material flow in a business;
- 3. conduct a simple forecast;
- 4. propose a facility location, design a layout, and design jobs for a small business;
- 5. describe and contrast several inventory systems;
- 6. describe the Logistics concept;
- 7. propose a materials management system;
- 8. analyze the operations of a small business and propose improvement solutions;
- 9. solve problems.

Course Content

- 1. Information and Material Flow
  - using flowcharts to describe and analyze the flow of information, people, and materials within a business
- 2. Product Design and Process Selection
  - nature of service and manufacturing
- 3. Total Quality Management
  - cost of quality, quality specification, W.E. Deming, continuous improvement, statistical quality control
- 4. Forecasting and Capacity Planning
  - simple forecasting methods, time series analysis, volume versus capacity, economies of scale, experience curve.
- 5. Facility Location and Layout
  - issues, factor rating, center of gravity, group technology, fixed position / retail / office layouts.
- 6. Job Design, Work Measurement, Learning Curves, Just-In-Time Systems
  - behavioural and physical motions
- 7. Project Management
- 8. Advanced Planning and Control Systems
  - production planning, independent versus dependent demand, MRP, Master Production Schedule, MRP, MRP2 and ERP, Fixed-order-Quantity, Order Quantity, Lot sizing
- 9. Scheduling
  - job shop scheduling, priority shop, floor control, network scheduling
- 10. Logistics, Materials Management and Purchasing
  - integrated management, purchasing and sourcing, materials handling.
- 11. Business Process Reengineering

- improving a business.
12. Problem-solving with Computers
- use of spreadsheets and other software.

Methods of Instruction

Lecture and discussion, computer seminars and plan

at tours.

Textbooks and Materials to be Purchased by Students

V.J. Stevenson, Production/Operations Management, Latest Edition. Irwin McGraw-Hill Publishers.

Means of Assessment

Assigned Work:

Assignments (6)	12%
Term Projects (3)	30%
Computing Test	03%
Class Participation	05%
Final Examination	50%

100%

Assessment and Recognition: specify whether course is open for PLAR

Prior Learning Assessment

No.

Committee Representative

Course Designer(s) Dave Waddington

Education Council/Curriculum

Registrar: Jill Angus

Dean: Jim Sator