



- 1. describe and contrast service and manufacturing operations
  - 2. describe information and material flow and estimate capacity for a small 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
  - 10. use a computer to 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 design of the system in process selection
  3. Total Quality Management
    - cost of quality, quality specification, W.I.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, yin-yang, group technology, fixed position / retail / office layouts.
  6. Job Design, Work Measurement, Learning Curves, Just-In-Time Systems
    - behavioural and physical considerations, methods, measurement, incentives, options
  7. Project Management
  8. Advanced Planning and Inventory 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%

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