COURSE INFORMATION FORM

DISCIPLINE
Business Administration

COURSE TITLE
Operations Management

CR.HR 3      LECT HR. 3      LAB HR.   CLIN/INTERN HR.   CLOCK HR.  

CATALOG DESCRIPTION
This course covers the central role and importance of the operations function in both service and product organizations. Strategy, design, scheduling, materials handling, inventory, production, MRP and distribution are covered.

PREREQUISITES
None

EXPECTED STUDENT OUTCOMES IN THE COURSE
Upon completion of this course, the student will be able to:
1. Demonstrate ability to manage organizational operations.
2. Use the various methods of forecasting demand.
3. Explain the factors involved in capacity planning.
4. Describe the various modes of physical transportation and facility location.
5. Define transformation process design and work design.
6. Describe the sequence of activities involved in the scheduling function.
7. Explain the basic principles of materials handling.
8. Explain and apply the basic principles of quality management.
9. Describe the basic principles of inventory management.
CLASS-LEVEL ASSESSMENT MEASURES

Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Course projects to assess the comprehension outcomes.
2. Role-play exercises to assess the application outcomes.
3. Examinations to assess the knowledge outcomes.

PROGRAM-LEVEL OUTCOMES ADDRESSED

General Education Outcomes
Specify which general education outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes and assessment measures.

Occupational Program Outcomes
Specify which occupational program outcomes, if any, are substantially addressed by the course by completing the “Course/Program Assessment Matrix” to show the relationship between course and program outcomes to assessment measures.
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Managing organizational operations
   A. Products versus services
   B. Value added to entities
   C. Transformation process
   D. Descriptive and strategic approach to operations
   E. Monitoring and feedback control process
   F. History of operations management

II. Operations strategy and outputs
    A. Strategic planning process
    B. Operations in the development of the organization’s strategic plan
    C. Mortality curve for new products
    D. Output design

III. Forecasting demand
     A. Forecasts in organizations
     B. Forecasting methods

IV. Capacity planning
    A. Effect of learning on capacity
    B. Output life cycle
    C. Breakeven concepts
    D. Decision tree

V. Logistics and facility location
   A. Tradeoffs between transportation and location
   B. Five modes of physical transportation

VI. Transformation process design and layout
    A. Four forms of transformation processes
    B. New technologies applicable to the transformation process
    C. Process life cycle
    D. Computerized layout and line balancing programs

VII. Work design
     A. Common approaches to increasing productivity
     B. Motion study and work measurement
C. Time study
D. Work sampling study

VIII. Schedule management
   A. Forward and backward scheduling
   B. Computer-based scheduling systems
   C. Aggregate scheduling

IX. Detailed scheduling
   A. Index method
   B. CPM and PERT
   C. Gantt chart

X. Materials management
   A. Materials handling equipment
   B. Inventory types and classes

XI. Materials requirements planning
   A. Product trees, parent items and bill of materials
   B. Independent versus dependent demand
   C. MRP system

XII. Quality management
   A. Quality assurance and quality control
   B. Inspection
   C. Sampling versus complete inspection
   D. Control charts

XIII. Inventory management
   A. Three major types of inventory management systems
   B. Costs in inventory systems
   C. Economic production lot size