Title of Workshop: Basics in Supply Chain Management

I. Description of Workshop:

The integration of activities for planning, implementing and controlling the efficient flow of raw materials, in-process inventory and finished goods from the supplier to the final consumer. (3)

II. Prerequisite(s): Graduate Standing

III. Purposes or Objectives of the Workshop:

A. To prepare participants for the Certified Production and Inventory Management (CPIM) exam on Basics in Supply Chain Management

B. To understand the problem of integrating across a wide span of activities including the production function, the warehousing function, transportation, and the marketing interface

C. To examine different operating policies regarding physical flows, materials and products from economic and customer service objectives

D. To provide classroom experience in applying the principles of supply chain management through case studies, guest lecturers, plant tours.

IV. Expectations of Participants:

A. Participants are expected to pass the CPIM exam on Basics in Supply Chain Management

B. Participants are expected to come prepared to engage in meaningful discussions on subjects related to the course material. Individual and team-oriented contributions are welcomed.

C. Participants are also expected to behave in an academically honest manner to preserve the integrity of the classroom and the learning environment.

V. Workshop Content or Outline:

A. Introduction to Supply Chain Management 6 hours
1. The supply chain concept
2. Role and importance of manufacturing
3. Manufacturing processes

B. Forecasting  6 hours

1. Characteristics of demand
2. Principles of forecasting and data collection
3. Qualitative techniques
4. Quantitative techniques
5. Tracking the forecast accuracy

C. Master Planning  6 hours

1. Manufacturing planning and control
2. Making the production plan
3. Resource requirements planning
4. Developing a master production schedule

D. Material Requirements Planning  6 hours

1. Materials requirement planning environment
2. Inputs to the MRP
3. MRP process
4. Output to the MRP
5. Using the MRP

E. Capacity Management and Production Activity Control  6 hours

1. Capacity management
2. Capacity planning process
3. Capacity requirement planning
4. Production activity control
5. Production scheduling and control

F. Inventory Fundamentals  6 hours

1. Objectives of inventory management
2. Aggregate inventory management
3. Inventory costs
4. Financial statements and inventory valuations
G. Inventory Management 6 hours
1. Independent demand ordering system
2. Economic order quantities
3. Order point system and safety stock
4. Periodic review system
5. Auditing inventory records
6. ABC inventory control

H. Physical Distribution and Warehousing 6 hours
1. Physical distribution
2. Warehousing
3. Distribution requirement planning
4. Transportation

I. Quality Management and Purchasing 6 hours
1. Total quality management
2. Costs associated with quality
3. Quality in manufactured products
4. Problem-solving methods
5. Process control versus inspection
6. Purchasing

J. Just-in-Time Manufacturing 6 hours
1. Just-in-time manufacturing
2. Continuous production and work cells
3. Process flexibility
4. Pull versus push system
5. Supplier relations and JIT
6. Total productive maintenance
7. Empowering employees
8. Relationships among MRP, JIT, and TQM

VI. Textbook(s) and/or Other Required Materials or Equipment:

A. Textbook

B. Supplementary Textbooks


VII. Basis for Participant Evaluation:

A. Performance on regularly scheduled performance checks.

B. Performance on final examination.

C. Graduate students may be required to pass the CPIM exam on Basics in Supply Chain Management.

D. Graduate students will be required to conduct team projects.

E. Quality of in-class participation