Understanding the role of the operations function and its impact on the competitiveness of the firm is an important part of any manager’s training. Operational issues include designing, acquiring, operating, and maintaining the facilities and processes; purchasing raw materials; controlling and maintaining inventories; and providing the proper labor needed to produce a good or service so that customers’ expectations are met. This course in operations management is intended to be a survey of operating practices and models in both manufacturing and service-oriented firms. It is intended to provide managers in all functional areas with sufficient knowledge to make informed “total business decisions” and to introduce standard terms and concepts for communications with operating personnel. In such a course, it should be recognized that breadth of subject matter, not depth of topic, will be the goal.

Bob Jacobs is the Chase Faculty Fellow and Professor of Operations Management at the Kelley School of Business, Indiana University. He has degrees in Industrial Engineering, Computer and Information Science, an MBA, and a Ph.D. in Operations Management. He is the author of over 50 research articles on topics, which include inventory control, ERP systems, the design of manufacturing facilities, cellular manufacturing and the scheduling of manufacturing operations. He is co-author of three widely used Operations Management textbooks: Operations and Supply Management: The Core (3rd edition 2012), Operations and Supply Management (13th edition 2010) and Manufacturing Planning and Control Systems for Supply Chain Management (6th edition 2010). He is co-author of a novel titled Why ERP? A Primer on SAP Implementation (2000). These books are published by McGraw-Hill/Irwin in multiple languages. His also co-author of Strategic Use of ERP (2006), published by Stanford Press. Professor Jacobs has recently taught courses in Supply Chain Management, Manufacturing Planning and Control for Supply Chain, and Business Process Design. Here is currently teaching the Honors I-Core Operations Management Course in the Kelley School of Business, Indiana University. Professor Jacobs is a fellow of the Decision Sciences Institute and past president of the Institute. He also has served on The Association for Operations Management (APICS) Board of Directors.

**Course Objectives**

- Build an understanding of how the Operations Manager fits into the organization.
- Provide a knowledge base for conversing with operations personnel.
- Build both quantitative and qualitative analysis skills, especially those needed to understand systems implemented through Enterprise Resource Planning systems.
- Show the similarities of operating problems in the Manufacturing and Service Sectors.

**Learning Outcomes**

- Communicate major operations concepts in an intelligent manner at a level compatible with practitioners in the field.
- Quantitatively analyze problems related to forecasting demand, projects, manufacturing and service processes, inventory supply and distribution, the location of warehouses, and basic quality control.
- Think critically by understanding such trade-offs as low cost versus quick customer service.
- See the importance of integrating the functions of the firm, particularly marketing and operations sales and production plans.
- Appreciate the risks and ethical implications associated with the different operations strategies.