

# MGMT 520 Operations Management in Global Supply Chains

### **Course Description**

Operations management is the design, operation, and improvement of the systems that create and deliver goods and services. Students will demonstrate mastery level knowledge of concepts and tools in fundamental areas of operations management, including process design and analysis, quality management, inventory management, demand forecasting, sales and operations planning, material requirements planning, lean production, and supply chain management. Students will also develop the ability to perform both quantitative and qualitative analysis of problems and issues in operations management as well as to analyze the ethical consequences of their decisions.

### **Course Learning Outcomes**

Upon successful completion of the course, students will be able to:

- 1. Demonstrate critical knowledge and understanding of theories, processes, for decisionmaking in operations and supply chain management.
- 2. Apply specialized theories, concepts, and ethical practices for effective operations management in diverse business settings.
- 3. Critically analyze a variety of relevant empirical data to support effective problem solving and decision making in operations management across varied business settings.
- 4. Critically evaluate quantitative and qualitative data to solve operations and supply chain problems.
- 5. Communicate at a professional level in both oral and written formats on operations and supply chain management practices in global, regional, and local business contexts.
- 6. Operate at a professional level with substantial responsibility for individual and group work activities on complex and undefined problems within operations and supply chain management field.

#### **Learning Resources**

Heizer, J. & Render, B., Munson, C., (2022) Operations Management: Sustainability and Supply Chain Management, 14th Ed, Pearson, ISBN-13: 9780137649136

## **Course Content**

- 1. Operations and Productivity
- 2. Operations Strategy in a Global Environment
- 3. Project Management
- 4. Forecasting
- 5. Design of Goods and Services
- 6. Managing Quality
- 7. Process Strategy
- 8. Location Strategies
- 9. Layout Strategies
- 10. Supply Chain Management
- 11. Inventory Management
- 12. Aggregate Planning and S&OP
- 13. Material Requirement Planning (MRP and ERP)
- 14. Lean Operations