

Spokane Falls Community College
COURSE LEARNING OUTCOMES AND OUTLINE

Prefix and Course Number
Course Title

BMGT 430
Manufacturing Management

Last Modified: Fall 2016

Course Learning Outcomes

By the end of this course, a student should be able to:

- Research and explain the five general steps of manufacturing and how a product goes from raw material to final packaging
- Summarize the history of manufacturing; its evolution from the Industrial Age to the rise of mechanization and automation in the industry.
- Define the concept of Quality Control and analyze the importance to the manufacturing process.
- Identify the 6 regions of risk and accurately explain how a failure in anyone impacts the total value stream.
- Describe why it is important for advanced manufacturing to incorporate Lean Principles and a daily management system.

Course Outline

- Introduction to Manufacturing Management
 - Historical Perspective
 - Definitions and Common Lexicon
 - 6 Regions of Risk (6 M's)
 - 7 Primary Principles of Production Management
- Manufacturing Systems
 - Just-In-Time (JIT)
 - Mass Production
 - Fabrication and Casting
 - Mix-Model
 - Technology in manufacturing
- Manufacturing Control
 - Total Quality Management
 - Quality Control and Assurance
 - Types of Control Data
- Manufacturing Process Management
 - Production Process Planning
 - Factory Layout Planning and Analysis
 - Toyota Kata and Management System
 - Steps in Manufacturing
- Science in Manufacturing Management
 - Failure Modes and Effects Analysis (FMEA)
 - Statistical Process Control (SPC)
 - Overall Equipment Effectiveness (OEE)
 - Problem Solving Techniques
- Principles of Lean Manufacturing
 - 7 Deadly Wastes

- 5S/Visual Management
- The Value Stream
- JIT and JIDOKA
- Cellular Flow and Line Balancing
- Kaizen