Miami Dade College

Course Description

MAN4520 | Quality Management | 3.00 credits

This course provides an understanding of various theories of quality management (QM). Students will learn how organizations can develop excellence through the adoption of continuous improvement and process management. The course analyzes and uses various process management techniques, continuous improvement tools, and strategies to improve quality. The conceptual and analytical skills acquired in this course enable students to provide leadership in shaping a culture for quality within an organization and determining the effectiveness of quality initiatives such as Total QM, Six Sigma, Process Capability, Process Control, and Customer Relationships. Prerequisite: MAN2021.

Course Competencies:

Competency 1: The student will describe quality management and its importance within the firm by:

1. Examining the concepts of quality management and performance excellence in organizations
2. Evaluating the historical developments in the quality movement and their importance
3. Analyzing manufacturing, service, healthcare, education, government quality, etc.
4. Evaluating the role of processes in Operations Management and identifying general types of processes
5. Illustrating the fundamental principles and practices of quality and performance excellence
6. Discussing relationships of quality with organizational models in management theory

Competency 2: The student will explain and analyze different quality management frameworks by:

1. Examining the prominent philosophies of quality management, such as those of Deming and Juran, which provide a basis for today's quality and performance excellence
2. Assessing the criteria for performance excellence used in the Malcolm Baldrige Award and related award programs
3. Demonstrating the basic quality and performance frameworks such as ISO 9000, Total Quality Management (TQM), and Six Sigma
4. Analyzing case studies that examine how to design and use performance management systems within varying organizational models

Competency 3: The student will learn how to use practical tools and techniques for quality design and control by:

1. Designing products and services to achieve improved customer satisfaction
2. Illustrating the application of selected process design and control tools
3. Describing principles of statistical thinking as a basis for effective quality management
4. Reviewing and summarizing case studies of organizations in the manufacturing, service, and education industries that have made substantial improvements by applying process

Competency 4: The student will learn how to use and apply quality improvement tools and techniques by:

1. Examining the philosophy and approaches to continuous improvement
2. Analyzing systematic improvement processes used by many organizations
3. Illustrating the application of a variety of tools for process improvement such as the Seven QC Tools, Root Cause Analysis, and Lean Thinking, including those used in Six Sigma, Lean Six Sigma, and Total Quality Management
4. Reviewing examples of organizations that have used various continuous improvement approaches to improve their processes

Competency 5: The student will examine and discuss the concepts of strategic management for performance by:

1. Examining the relationship between quality and profitability in business organizations
2. Analyzing cost leadership, differentiation, and people as principal resources of competitive advantage and their relationship to quality
3. Illustrating the importance of quality in meeting customer expectations in product design, service, flexibility and variety, innovation, and rapid response
4. Examining the role of information in strategic planning and quality-focused decision making

5. Describing the role of quality in strategy formulation and implementation.

Competency 6: The student will explore and explain the importance of customer-supplier relationships by:
1. Correlating the importance of customer-supplier relationships (CSRs) to achieving performance excellence
2. Examining and assessing the principles and practices of quality customer relationships
3. Developing effective partnerships between customers and suppliers
4. Comparing and contrasting a quality-focused approach to customers and suppliers to conventional organizational theories
5. Providing examples of organizations successfully utilizing quality customer relationships

Competency 7: The student will describe and explain the design of organizations for performance excellence by:
1. Analyzing issues related to choosing organizational structures
2. Evaluating the functional structure, the most common organizational structure used in business, and its limitations
3. Determining how aspects of functional structures can impede quality and the changes necessary to create organizational structures that support quality and high performance
4. Providing examples of how firms are making substantial changes to their organizations to implement a greater focus on quality and performance excellence

Competency 8: The student will explain the importance of high-performance teams to promote quality by:
1. Examining the importance of teams in a quality environment
2. Comparing the different types of teams used in organizations
3. Evaluating some of the factors associated with the successful use of teams
4. Proving examples of effective high-performance teams in action
5. Relating the use of quality-focused teams to organizational behavior theories

Competency 9: The student will examine the importance of employee engagement, empowerment, and motivation by:
1. Analyzing the importance of workforce satisfaction and employee engagement
2. Analyzing the importance of empowerment and describing the principles of successful empowerment
3. Providing examples of firms practicing employee engagement and describing their experiences
4. Relating and linking engagement and empowerment to theories of motivation

Competency 10: The student will examine the role of leadership in performance excellence by:
1. Analyzing and discussing the importance of leadership for quality
2. Illustrating the role of leaders in performance excellence
3. Selecting leaders who have inspired their organizations to achieve quality and performance excellence in business
4. Providing examples of leadership practices in high-performing organizations
5. Comparing and contrasting the Total Quality leadership perspective to several prominent leadership theories
6. Analyzing the importance of leadership, governance, and societal responsibilities in quality organizations

Competency 11: The student will describe the importance of performance excellence and organizational change by:
1. Analyzing the importance and scope of organizational change to achieving performance excellence
2. Analyzing how organizations build a strong quality culture, sustain performance, and continually improve organizational effectiveness
3. Proving examples of companies undertaking organizational changes and their approaches to implementing quality management
4. Analyzing how Total Quality perspectives on organizational change relate to organization theory

Competency 12: The student will describe, explain, and apply statistical process control and tools by:
1. Describing quality control systems and key issues in manufacturing and service
2. Analyzing the concept of Statistical Process Control (SPC) and the types of variation
3. Describing how to construct and interpret simple process control charts for continuous and discrete data
4. Analyzing and calculating process capability indexes
5. Analyzing process reengineering and process improvement
6. Describing practical issues in the implementation of SPC

Learning Outcomes:

- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Demonstrate knowledge of diverse cultures, including global and historical perspectives
- Create strategies that can be used to fulfill personal, civic, and social responsibilities