Syllabus for APS-5020

ADVANCED QUALITY ANALYSIS

COURSE DESCRIPTION

Advanced Quality Analysis course will explore the most up-to-date quality methods, research, and tools that companies need to succeed in today's challenging environment. Students will explore today's quality management landscape and the universal applications, procedures, techniques, and strategies used in attaining superior and sustainable business results through quality.

COURSE TOPICS

- Results through Quality
- Quality's Impact on Society and the National Culture
- Universal Methods to Manage for Quality
- Quality Planning
- Quality Improvement
- Quality Control
- Strategic Planning and Deployment
- Business Process Management
- Eco-Quality for Environmental Sustainability
- Lean Techniques
- Six Sigma
- Root Cause Analysis
- Continuous Innovation
- Benchmarking
- International Standards
- National Awards for Excellence
- Tools to Design, Control, and Improve Performance
- Measurement Systems
- Product, Service, Self-Service, Healthcare, Continuous Process, and Defense Based Organizations
- "Useful Many" Processes
- The Quality Office
- Research & Development
- Software and Systems Development
- Supply Chain
- Effective and Efficient Governance

COURSE OBJECTIVES

After completing this course, you should be able to:

CO 1 Analyze the leadership/managerial role in attaining quality.

CO 2 Differentiate between the most effective managerial methods and tools for implementing and deploying quality for attaining superior results, such as Lean, Six Sigma, Root Cause Analysis, Continuous Innovation, and more.

CO 3 Investigate how to apply universal methods for delivering superior results and organizational excellence in any industry, business, and/or company.

CO 4 Research then give examples of different types of industry applications (Product-Based Organizations, Service-Based Organizations, Self-Service-Based Organizations, Health Care-Based Organizations, Continuous Process-Based Organizations, Defense-Based Organizations) and how they effectively apply quality management.

CO 5 Analyze the need for quality software and quality software development methods.

CO 6 Compare and contrast the roles of key functions of quality professionals, research and development, supply chain, and governance to attain superior results in an organization.

CO 7 Identify and analyze pragmatic roadmaps, templates, and tools to aid in developing an effective and sustainable performance excellence system.

COURSE MATERIALS

You will need the following materials to complete your coursework. Some course materials may be free, open source, or available from other providers. You can access free or open-source materials by clicking the links provided below or in the module details documents. To purchase course materials, please visit the University's textbook supplier.

Required Textbooks

- Defeo, Joseph A., and Juran, J. M. 2010. *Juran's Quality Handbook: The Complete Guide to Performance Excellence*. 6th Edition. The Juran Institute: McGraw-Hill.
  ISBN-13 9780071629737

COURSE STRUCTURE

Advanced Quality Analysis is a three-credit online course, consisting of **four** modules. Modules include an overview, topics, study materials, and activities. Module titles are listed below.

- **Module 1: Leadership**
  What everyone needs to know about managing for superior quality and results
  Course objectives covered in this module include objective # 1, 3, 7

- **Module 2: Methods**
  The most effective methods and tools for attaining superior results, such as Lean, Six Sigma, Root Cause Analysis, Continuous Innovation, and more
  Course objectives covered in this module include objective #2

- **Module 3: Industry applications**
  Effectively applying quality management
  Course objectives covered in this module include objective #4

- **Module 4: The roles of key functions**
  Including quality professionals, research and development, supply chain, and governance - and what they must carry out to attain superior results in an organization
  Course objectives covered in this module include objective #5, 6

ASSESSMENT METHODS

For your formal work in the course, you are required to participate in online discussion forums, complete written assignments, and a final project. See below for more details.

Consult the Course Calendar for assignment due dates.

Online Discussion Forums

You are required to participate in **eight** graded discussion forums. Discussion forums are on a variety of topics associated with the courses modules. There is also an ungraded but required introductions forum in module 1.

For posting guidelines and help with discussion forums, please see the Student Handbook located within the General Information page of the course Web site.

Written Assignments

You are required to complete **eight** written assignments. The written assignments are on a variety of topics associated with the courses modules.

For help regarding preparing and submitting assignments, see the Student Handbook located within the General Information page of the course Web site.

Final Project

This course requires each student to complete a final project. The project will be your opportunity to demonstrate that you have the ability to transfer and utilize knowledge learned throughout this course.

Requirements: Your final paper must be at least 15 pages and no more than 20 pages excluding the title and reference pages with a font size of 12 Times New Romans and 1.5 spacing for paragraph formatting.

For help regarding preparing and submitting assignments, see the Student Handbook located within the General Information page of the course Web site.

GRADING AND EVALUATION

Your grade in the course will be determined as follows:

- **Online discussions (8)**—20 percent
- **Written assignments (8)**—40 percent
- **Final project**—40 percent

All activities will receive a numerical grade of 0–100. You will receive a score of 0 for any work not submitted. Your final grade in the course will be a letter grade. Letter grade equivalents for numerical grades are as follows:

A	=	93–100	B	=	83–87
A–	=	90–92	C	=	73–82
B+	=	88–89	F	=	Below 73

To receive credit for the course, you must earn a letter grade of C or higher on the weighted average of all assigned course work (e.g., assignments, discussion postings, projects, etc.). Graduate students must maintain a B average overall to remain in good academic standing.

STRATEGIES FOR SUCCESS

First Steps to Success

To succeed in this course, take the following first steps:

- Read carefully the entire Syllabus, making sure that all aspects of the course are clear to you and that you have all the materials required for the course.
- Take the time to read the entire Online Student Handbook. The Handbook answers many questions about how to proceed through the course, how to schedule exams, and how to get the most from your educational experience at Thomas Edison State University.
- Arrange to take your examination(s) by following the instructions in this Syllabus and the Online Student Handbook.
- Familiarize yourself with the learning management systems environment—how to navigate it and what the various course areas contain. If you know what to expect as you navigate the course, you can better pace yourself and complete the work on time.
- If you are not familiar with Web-based learning be sure to review the processes for posting responses online and submitting assignments before class begins.

Study Tips

Consider the following study tips for success:

- To stay on track throughout the course, begin each week by consulting the Course Calendar. The Calendar provides an overview of the course and indicates due dates for submitting assignments, posting discussions, and scheduling and taking examinations.
- Check Announcements regularly for new course information.

ACADEMIC POLICIES

To ensure success in all your academic endeavors and coursework at Thomas Edison State University, familiarize yourself with all administrative and academic policies including those related to academic integrity, course late submissions, course extensions, and grading policies.

For more, see:

- University-wide policies

- Undergraduate course policies and regulations
- Graduate academic policies
- Nursing student policies
- Academic code of conduct