## **Quality Management and Statistical Analysis**

MGMT580 Southwestern College Professional Studies



# **COURSE SYLLABUS**

### I. Course Catalog Description

This course explores foundations of quality management. Tools and methods for analytic study including basic probability and statistics are discussed. Models of quality management are utilized through practical case study application. Learners will have the opportunity to apply quality management and statistical analysis to a real-world project of their choice.

#### II. Required and Supplementary Instructional Materials

Summers, D. C. S. (2010). Quality (5th ed.). Upper Saddle River, NJ: Pearson Education.
Summers, D. C. S. (2010). Quality: Student solutions manual (5th ed.). Upper Saddle River, NJ: Pearson Education.

#### III. Learning Outcomes

Learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each course and each <u>undergraduate</u> and <u>graduate</u> program of study, as well as <u>institution-wide outcomes</u> related to the mission and vision of the college. Outcomes can help learners and instructors focus on the big picture of the learning experience and can help inform potential employers about a graduate's knowledge and skills.

Upon successfully completing this course, the learner will be able to:

- Explain the ways in which basic probability and statistical concepts are used in the field of quality management
- Evaluate various models of quality management
- Apply quality management and statistical analysis to a real-world project

At the end of the course, learners may vary in their ability to achieve these outcomes. You are more likely to achieve these outcomes only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

#### IV. Course Policies

Students are expected to read and abide by the course policies located in the instructor-specific syllabus in the blackboard course.

#### V. Course Requirements:

Requirements	Number of Assignments	Points Possible	Percent of Grade
Discussions	6	300	30%
Case Studies	3	300	30%
Homework	2	100	10%
Paper	1	100	10%
Final Project	1	200	20%
Total Points		<mark>1,000</mark>	<mark>100</mark>

VI.	/I. Course at a Glance:		
Unit	<b>Reading &amp; Preparation Activities</b>	Graded Work Due	
1	<ul> <li>Read Summers chapters 1-3</li> </ul>	Introductions Discussion	
	Review chapter 1-3 powerpoint presentations	Unit 1 Case Study	
	<ul> <li>Read the Final Project Assignment and begin working on your project</li> </ul>	Unit 1 Paper	
2	Read Summers chapters 4-5	Unit 2 Discussion	
	• Review chapter 4-5 powerpoint presentations	Unit 2 Case Study	
	Review the Unit 2 Class examples		
	<ul> <li>Continue working on your final project</li> </ul>		
3	Read Summers chapters 6-7	Unit 3 Discussion	
	Review chapter 6-7 powerpoint presentations	Unit 3 Homework	
	<ul> <li>Review the Unit 3 in class examples</li> </ul>		
	<ul> <li>Continue working on your final project</li> </ul>		
4	<ul> <li>Read Summers chapters 8, 9 and 12</li> </ul>	Unit 4 Discussion	
	<ul> <li>Review chapter 8, 9 and 12 powerpoint presentations</li> </ul>	Unit 4 Homework	
	• Review the Unit 4 in class examples		
	Review the Unit 4 Permutations &		
	<b>Combination Instructions handout</b>		
	<ul> <li>Continue working on your final project</li> </ul>		
5	Read Summers chapters 13-15	Unit 5 Discussion	
	<ul> <li>Review chapter 13-15 powerpoint</li> </ul>	Unit 5 Case Study	
	presentations		
	Continue working on your final project		
6	<ul> <li>Finish up your final project</li> </ul>	Unit 6 Discussion	
		Final Project	

## VII. Other Policies and Requirements

Follow this link to the Southwestern College Professional Studies <u>Standard Syllabus</u> in Blackboard. You may be required to log in.