

ISE 527 Quality Management for Engineers  
Fall Semester 2013  
Tu,Th 3:30 - 4:50 pm  
Room: OHE 132  
Web Site: www.uscden.net

Kurt Palmer  
Office: GER 205  
Hours: M,W 10:30 am - 12:00 pm  
Phone: 740-5960  
E-mail: kpalmer@usc.edu

**Objective:** In this course, you will learn how to develop, deploy, and maintain systems of business practices that assure marketplace acceptance of the products and services provided by a company. We will compare and contrast the philosophical frameworks advocated by celebrated management consultants such as Deming, Juran, and Crosby. We will examine national (Malcolm Baldrige Award) and international (ISO 9000) management system models that have become standards in the field. We will also review a variety of methods that have been used to implement the models. Case studies of award winning companies will be used to demonstrate successful practices. Local or hypothetical businesses will be evaluated to identify deficient practices and improvement strategies.

**Text:** Evans and Lindsay, Managing for Quality and Performance Excellence, 9<sup>th</sup> edition

**Course Material:** Chapters 1-6 and 9-13 of the text, plus topics discussed in lecture by the instructor  
Chapters 7-8 will be covered very lightly

**Grading Policies:**

Points Breakdown -

Homework	180
Exam #1	140
Exam #2	140
Final Exam	<u>140</u>
Total	600

Course GRADES will be determined by the distribution of point totals for the class. “Natural groupings” will be used to assign letter grades. The highest scoring group will receive A’s, the next group is the A–’s, and so on. A single point will not be the difference between any two letter grades. A “gap” must exist to create a grade boundary.

HOMEWORK assignments will be due on the following Thursdays:

**August 29; September 5, 12; October 10, 17, 24; November 14, 21; and December 5**

Each assignment is worth 20 points. Points will be allocated to each assigned exercise. If a paper shows a relevant answer to a qualitative exercise, the grade for the exercise is full credit. If a paper shows an answer for a quantitative exercise that uses approximately the correct method, the grade for the exercise is full credit. If any exercise is unacceptable, the grade for the exercise is 0 points. Late assignments will be accepted for full credit until the Monday following the original due date.

An EXAM will be given on each of the following dates:

**Thursday, September 19 and Thursday, October 31**

Each exam will cover the material presented up to and including the preceding homework assignment. Points will be assigned to each section of the exam. Partial credit will be awarded according to work shown. No re-takes will be allowed. No make-up exam will be given.

The FINAL EXAM is scheduled for **Tuesday, December 17, at 2:00-4:00**. It will cover material presented since the second midterm exam. Grading will be similar to the midterm exams.

Reading Assignments:

Week	Topic	Text Sections
1	Define Quality, "Total Quality"	Chapter 1 Chapter 2, pp. 66-69
2	Philosophical Frameworks	Chapter 2, pp. 47-64
3	ISO 9000 Management System Model Baldrige Award Criteria	Chapter 2, pp. 78-83 Chapter 10, pp. 521-537
4	Six Sigma Lean Operations Exam	Chapter 9, pp. 469-471 Handout
5	Customer Focus	Chapter 3
6	Performance Management	Handout
7	Workforce Focus	Chapter 4
8	Process Focus, Supplier Certification	Chapter 5 Handout
9	Statistical Thinking Basic Statistical Methods	Chapter 2, pp. 70-77 Chapter 6, pp. 269-287
10	Process Improvement Exam	Chapter 9, pp. 472-495
11	Leadership	Chapter 13
12	Strategy	Chapter 11
13	Measurement and Knowledge Management	Chapter 12
14	Advanced Statistical Methods	Chapter 8, pp. 393-399, 420-423 Chapter 6, pp. 288-296
15	Product Design	Chapter 7

### Academic Integrity:

The Department of Industrial and Systems Engineering adheres to the University's policies and procedures governing academic integrity as described in SCampus. Students are expected to be aware of and to observe the academic integrity standards described in SCampus. Students should expect those standards to be enforced in this course.

### Accommodations for Disabilities:

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to the instructor as early in the semester as possible. DSP is located in STU 301 and is open 8:30 am - 5:00 pm, Monday through Friday. The phone number for DSP is (213)740-0776.