

**CALIFORNIA STATE UNIVERSITY, CHICO**  
Department of Mechanical and Mechatronic Engineering and Advanced Manufacturing  
Spring 2021

## **Course Syllabus**

**SMFG 451/OSCM 451- Quality Management – 3.0 Units**

Prerequisite:           OSCM 306

Course Times:       Lecture           T, R   11 AM to 12:15 APM           Online

Instructor:           Prof. Joe Greene ([jpgreene@csuchico.edu](mailto:jpgreene@csuchico.edu))

Office:                Location-       LANG 118 – Phone: 898-4977  
                          Hours            T, R: 9 AM to 10:50 AM

### **Course Description**

The study and application of the quality management process in both the manufacturing and service sectors of the economy. Key topics include, but are not limited to statistical process control, cost of quality, quality measurement, reliability testing, sampling, 6 sigma, value stream mapping, prioritization matrices, DMAIC (Design, Measure, Analyze, Improve, & Control) and FMEA.

### **Course Goal**

Provide students with a broad understanding of “quality” in the manufacturing sense of the word. Students should be able to problem solve and make data driven decisions using best practices that are statistically based.

### **Course Usage of Blackboard Learn (BB Learn)**

We will use Bb Learn for communication and student records. You can track your own progress, access the syllabus, course assignments, paper formatting, etc. through this system. It is your responsibility for regularly checking the online resources, which is accessed through the Chico State Portal at <http://portal.csuchico.edu>.

### **Required Textbook and Materials**

- Managing Quality – Integrating the Supply Chain, 5th Edition, S. Thomas Foster ISBN: 9780132737982 (Required)

### **General**

1. Excused absences are allowed only for illness (doctor’s note required) or other serious reasons with permission prior to the class. You will be considered absence if you arrive after class begins, or leave before completion of the class/experiment.
2. All cellular phones should be turned off in the lab except when they are used for timing purpose in experiments with instructor’s permission.
3. Exams and quizzes are closed book and notes unless prior arrangements are made.
4. Grades will be reduced one full grade for each week your project assignment is late. Homework is not accepted beyond the due date/time.
5. Distracting or disruptive behavior during class time may be used as grounds for being dropped from the class and/or for reduction in grade.

## **Grading**

In-Class Quizzes	10%
Midterm exam	20%
Final exam	25%
Papers	20%
Activities	10%
Homework	10%
Individual Class Participation/Attendance	<u>5%</u>
	<u>100%</u>

## **Dropping and Adding Class**

You are responsible for understanding the policies and procedures about add/drops, academic renewal, etc., found in the [CSU Chico University Catalog](#). The last day to add or drop the class without instructor's permission is Friday, Feb 1, 2019.

## **University Policies and Resources Academic integrity**

Students are expected to be familiar with the University's Academic Integrity Policy. Your own commitment to learning, as evidenced by your enrollment at California State University, Chico, and the University's Academic Integrity Policy requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the Office of Student Judicial Affairs. The policy on academic integrity and other resources related to student conduct can be found at: <http://www.csuchico.edu/sjd/integrity.shtml>.

## **Americans with Disabilities Act**

If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Please also contact Accessibility Resource Center (ARC) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations.

### **Accessibility Resource Center**

530-898-5959

Student Services Center 170

[arcdept@csuchico.edu](mailto:arcdept@csuchico.edu)

## **Student Learning Center**

The mission of the Student Learning Center (SLC) is to provide services that will assist CSU, Chico students to become independent learners. The SLC prepares and supports students in their college course work by offering a variety of programs and resources to meet student needs. The SLC facilitates the academic transition and retention of students from high schools and community colleges by providing study strategy information, content subject tutoring, and supplemental instruction. The SLC is online at <http://www.csuchico.edu/slc>.

## SMFG 451 Schedule

<u><b>Week</b></u>	<u><b>Chapter</b></u>	<u><b>Homework</b></u> ++
1. Jan 26	Perspectives on Quality	Chap 1
2. Feb 2	Quality Theory	Chap 2
3. Feb 9	Quality Standards	Chap 3
4. Feb 16	Exam 1 (R)	
5. Feb 23	Strategic Quality Planning	Chap 4
6. Mar 2	Voice of the Customer	Chap 5
7. Mar 9	Voice of the Market	Chap 6
	<i>[Article 1 Due]</i>	
*** Mar 15	Spring Break ***	
8. Mar 23	Design Quality Products	Chap 7
	<u><i>Mid-term (Thursday)</i></u>	
9. Mar 30	Design Quality Service	Chap 8
	<i>[Article 2 Due]</i>	
10. Apr 6	Managing Supplier Quality	Chap 9
11. Apr 13	Introduction to Lean	
12. Apr 20	Variable Statistical Quality	Chap 11
13. Apr 27	<i>[Quality Paper Due]</i>	
14. May 4	Lean 6-Sigma	Chap 13
15. May 11	Design of Experiments	
	<i>[Lean Paper Due]</i>	
<b>16. May 17</b>	<b>TBD Final Exam</b>	

++ Note: Homework will be due on Tuesday

++ Note: Papers will be due on Thursday