# Principles of Quality (PTAC 2314 3D1)

## **CREDIT**

3 Semester Credit Hours (3 hours lecture, 0 hours lab)

#### MODE OF INSTRUCTION

Face to Face

# PREREQUISITE/CO-REQUISITE:

MATH 1332, PTAC 1302

# LAMAR INSTITUTE OF TECHNOLOGY

## **COURSE DESCRIPTION**

Study of the background and application of quality concepts. Topics include team skills, quality tools, statistics, economics and continuous improvement.

#### **COURSE OBJECTIVES**

Upon completion of this course, the student will be able to

- 1. Use statistical process controls to collect, organize, and analyze data.
- 2. Describe the principles of quality control
- 3. Use quality tools

## INSTRUCTOR CONTACT INFORMATION

Instructor: L.G. Williams

Email: lwilliams4@lit.edu

Office Phone: 409-427-5355

Office Location: T5 Room 108D

Office Hours: Monday and Wednesday 8:00 – 9:00

# **REQUIRED TEXTBOOK AND MATERIALS**

1. Quality Concepts for the Process Industry (ISBN: 978-1435482449)

# ATTENDANCE POLICY

- 1. Missing more than 20% of classes will result in an automatic "F" for the course.
- 2. Absences are counted for unexcused, excused and coming to class late.
- 3. Missing more than 20% of a class period will count as an absence.
- 4. Being tardy 2 times equals 1 absence.

Approved: Initials/date

# **DROP POLICY**

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

# **COURSE CALENDAR**

DATE	TOPIC	READINGS	ASSIGNMENTS
		(Due on this Date)	(Due on this Date)
Week 1,2	Course introduction and	Chapter 1	
	policies	Chapter 2	
	Why Quality is	Chapter 3	
	Important		
	How It All Began		
<u> </u>	The Quality Gurus		
3	The International		Test 1 Chap. 1-3
	Standards Organization		
4	Total Quality	Chapter 5	
	Management	Chapter 6	
	Customer Satisfaction		
5	Employee	Chapter 7	Test 2 Chap. 4-6
	Empowerment		
6	Teamwork and Teams	Chapter 8	
7	Communication	Chapter 9	
8	Personal Effectiveness	Chapter 10	Test 3 Chap. 7-9
9	The Economics of Quality	Chapter 11	
10	Quality as a System	Chapter 12	
11	The Cost of Quality	Chapter 13	Test 4 Chap. 10-12
12	Quality Tools (part 1)	Chapter 14	
	Quality Tools (part 2)	Chapter 15	
13	Variation	Chapter 16	Test 5 Chap 13 - 15
14	Statistical Process	Chapter 17	
	Control	Chapter 18	
	SPC and Control Charts	Chapter 19	

	Process Capability	
15		Test 6 Chap.16-20
16		Final Exam Chap.1-20

## **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

Assignments	10%
Exams (6)	50%
Final	40%

## **GRADE SCALE**

• 90-100 A

• 80-89 B

• 70-79 C

• 60-69 D

• 0-59 F

## **TECHNICAL REQUIREMENTS**

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <a href="https://lit.edu/online-learning/online-learning-minimum-computer-requirements">https://lit.edu/online-learning/online-learning-minimum-computer-requirements</a>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

## **DISABILITIES STATEMENT**

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email <a href="mailto:specialpopulations@lit.edu">specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations@lit.edu">Specialpopulations@lit.edu</a>. You may also visit the online resource at <a href="mailto:specialpopulations">Specialpopulations</a>—

## STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT* 

Catalog and Student Handbook. The LIT Catalog and Student Handbook may be accessed at <a href="www.lit.edu">www.lit.edu</a>. Please note that the online version of the LIT Catalog and Student Handbook supersedes all other versions of the same document.

# **STARFISH**

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

# ADDITIONAL COURSE POLICIES/INFORMATION

Weekly assignments subject to change per LIT and the Instructor.