# Principles of Quality (PTAC 2314 2A1)

#### **CREDIT**

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

#### **MODE OF INSTRUCTION**

Online

# LAMAR INSTITUTE OF TECHNOLOGY

## PREREQUISITE/CO-REQUISITE:

MATH 1332, PTAC 1302

#### **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: Tiffany Williams-Parker

Email: tlparker@lit.edu

Office Phone: 409-257-0069

Office Location: TA5-108C

Office Hours: Office Hours

#### **REQUIRED TEXTBOOK AND MATERIALS**

Quality Concepts for the Process Industry (ISBN: 13: 978-1-4354-8244-9).

#### ATTENDANCE POLICY

Online class, with Blackboard course login required three times per week minimum.

#### **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.

Approved: Initials/date

# **COURSE CALENDAR**

DUE DATE	TOPIC	Reference
9/2/24	Introduction Journal	
9/15/24	Course introduction and policies	Chapter 1
	Why Quality is Important	Chapter 2
	How It All Began	Chapter 3
	The Quality Gurus	
	TEST 1	
10/6/24	The International Standards Organization	Chapter 4
10/6/24	Total Quality Management	Chapter 5
	Customer Satisfaction	Chapter 6
	TEST 2	
10/20/24	Employee Empowerment	Chapter 7
10/20/24	Teamwork and Teams	Chapter 8
10/20/24	Communication	Chapter 9
	TEST 3	
11/3/24	Personal Effectiveness	
		Chapter 10
11/3/24	The Economics of Quality	Chapter 11
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11/3/24	Quality as a System	Chapter 12
	TEST 4	
11/17/24	The Cost of Quality	Chapter 13
11/17/24	Quality Tools (part 1)	Chapter 14
	Quality Tools (part 2)	Chapter 15
	TEST 5	
12/4/24	Variation	Chapter 16
12/4/24	Statistical Process Control	Chapter 17
	SPC and Control Charts	Chapter 18
	Process Capability	Chapter 19
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12/4/24	Epilogue-The Advantages of Quality	Chapter 20
	TEST 6	
12/8/24	Final Exam Chap.1-20	

# **COURSE EVALUATION**

Final grades will be calculated according to the following criteria:

Assignments 10%Exams 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@lit.edu</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="https://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.

# ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses

#### **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