Principles of Quality (PTAC 2314 3A1)

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

MODE OF INSTRUCTION

Face to Face

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: L.G. Williams

Email: lwilliams4@lit.edu

Office Phone: 409-427-5355

Office Location: T5 Room 108D (Copier Room)

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.

COURSE CALENDAR

| COURSE CALENDAR DEADINGS ASSIGNMENTS | | | | | |
|---------------------------------------|---|--------------------------------|--------------------------------|--|--|
| DATE | TOPIC | READINGS (Due on this Date) | ASSIGNMENTS (Due on this Date) | | |
| Mook 1.2 | Course introduction and | Chapter 1 | Plickers | | |
| Week 1,2 | policies Why | Chapter 2 | Pilckers | | |
| | Quality is | Chapter 3 | | | |
| | Important | Chapter 3 | | | |
| | How It All Began | | | | |
| | The Quality Gurus | | | | |
| 3 | The International | Chapter 4 | Plickers | | |
| | Standards Organization | Chapter 5 | | | |
| 4 | Test Review | Chapters 1-5 | Test #1 Chapters 1-5 | | |
| | Overheads Chapters 1-5 | | Assignment #1 | | |
| | | | | | |
| 5 | Customer Satisfaction | Chapter 6 | Plickers | | |
| | Employee Empowerment | Chapter 7 | | | |
| 6 | Teamwork and Teams | Chapter 8 | Plickers | | |
| | Communication | Chapter 9 | | | |
| 7 | Personal Effectiveness | Chapter 10 | Plickers | | |
| | | | Assignment #2 | | |
| | | | | | |
| 8 | Test #2 Review | Chapters 6-10 | Plickers | | |
| | Overheads (Chapters 6-10) | Chapter 11 | Test #2 Chapters 6-10 | | |
| | | • | • | | |
| 9 | | | | | |
| | Spring Break | Spring Break | Spring Break | | |
| 10 | Quality as a System | Chapter 12 | Plickers | | |
| | The Cost of Quality | Chapter 13 | Assignment # 3 | | |
| 11 | Quality Table (no. at 4) | Chantar 14 | Diekore | | |
| 11 | Quality Tools (part 1) Quality Tools (part 2) | Chapter 14 Chapter 15 | Plickers | | |
| | Quality 100is (part 2) | Chapter 15 | | | |
| 12 | Test #3 Review | Chapters 11-15 | Test #3 Chapters 11-15 | | |
| | Overheads (Chapters | • | · | | |
| | 11-15) | | | | |
| 13 | Variation | Chapter 16 | Plickers | | |
| | Statistical Process Control | Chapter 17 | Assignment # 4 | | |
| | | | | | |

| 14 | SPC and Control Charts | Chapter 18 | Plickers |
|----|--|----------------|------------------------|
| | Process Capability | Chapter 19 | |
| | Epilogue | Chapter 20 | |
| | | | |
| 15 | Test #4 Review Overheads (Chapters 16- 20) | Chapters 16-20 | Test #4 Chapters 61-20 |
| 16 | | | Final Exam Chap.1-20 |

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

| Assignments | 10% |
|-------------|-----|
| Exams (4) | 50% |
| Final | 40% |

GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

Course Policies

- 1. No cheating of any kind will be tolerated. Students caught cheating or helping someone to cheat can and will be removed from the class for the semester. Cheating can result in expulsion from LIT.
- 2. If a test is missed due to an emergency situation, the student will have one week to make it up; otherwise a grade of 0 will be assigned.
- 3. A student who wishes to drop a course is responsible for initiating and completing the drop process. A student who stops coming to class, and fails to drop the course, will earn an "F" in the course.

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 specialpopulations@lit.edu. You may also visit the online resource at Special Populations-Lamar Institute of Technology (lit.edu).

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 www.lit.edu. 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.