



**Course Information**

<b>Course Title</b>	Principles of Quality
<b>Course Prefix, Num. and Title</b>	PTAC 2314 Principles of Quality
<b>Division</b>	Vocational Science
<b>Department</b>	Process Technology
<b>Course Type</b>	WECM Course
<b>Course Catalog Description</b>	Study of the background and application of quality concepts. Topics include team skills, quality tools, statistics, economics and continuous improvement.
<b>Pre-Requisites</b>	TSI requirements satisfied.
<b>Co-Requisites</b>	Enter Co-Requisites Here.

**Semester Credit Hours**

<b>Total Semester Credit Hours (SCH): Lecture Hours:</b>	3:3:0
<b>Lab/Other Hours</b>	
<b>Equated Pay Hours</b>	3
<b>Lab/Other Hours Breakdown: Lab Hours</b>	0
<b>Lab/Other Hours Breakdown: Clinical Hours</b>	Enter Clinical Hours Here.
<b>Lab/Other Hours Breakdown: Practicum Hours</b>	Enter Practicum Hours Here.
<b>Other Hours Breakdown</b>	List Total Lab/Other Hours Here.

**Approval Signatures**

<b>Title</b>	<b>Signature</b>	<b>Date</b>
<b>Prepared by:</b>		
<b>Department Head:</b>		
<b>Division Chair:</b>		
<b>Dean/VPI:</b>		
<b>Approved by CIR:</b>		

## Additional Course Information

**Topical Outline:** Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, and clinical or other non-lecture instruction).

History and philosophies of quality in industry	Two Weeks
Current state and standards of quality in industry	One Week
Economic impact of quality process	One Week
Communication and teamwork	Two Weeks
Quality tools	Two Weeks
Concepts and Application of statistical process control	Two Weeks
Process Capability	Two Weeks

### Course Learning Outcomes:

#### Learning Outcomes – Upon successful completion of this course, students will:

Use statistical process control to collect, organizes, and analyze data; describe the principles of quality control; and use quality tools.

The following list of learning outcome is a Key Activity from the Chemical/Refining Process Technician skill standards, developed by the North American Process Technology Alliance (NAPTA), and recognized by the Texas Skill Standards Board (TSSB). This outcome has been integrated into the PTAC-2314 Principles of Quality course:

1. Comply with Local, State and Federal Policies and Procedures

#### Methods of Assessment:

Written Exams  
Homework  
Quality Tool Project

### Required text(s), optional text(s) and/or materials to be supplied by the student:

Process Quality (PTEC), Pearson Custom Publishing, 75 Arlington Court, Suite 300, Boston, MA 02116, (A CAPT book), ISBN 0-13-700409-5

### Suggested Course Maximum:

30

### List any specific or physical requirements beyond a typical classroom required to teach the course.

None

Version: 3/20/2019

## Course Requirements/Grading System:

Evaluative Procedures:

1. Major tests (including mid-term)
2. Cross Disciplinary Skills (work ethic, safety, teamwork, housekeeping, independent thinking and problem solving, attitude, daily performance including preparation, computer proficiency)
3. Special Student Project
4. Final examination

The following method is used to arrive at the final grade:

Major Tests	40%
Daily Grade (Homework, Cross Disciplinary skills)	10%
Special Student Project	20%
Final Exam	30%

The grade classifications as outlined in the College Catalog are employed:

A	Excellent	100-90
B	Good	89-80
C	Average	79-70
D	Poor (lowest passing grade)	69-60
F	Failure	59 and below

## Curriculum Checklist:

- Administrative General Education Course** (from ACGM, but not in WCJC Core) – No additional documents needed.
- Administrative WCJC Core Course.** Attach the Core Curriculum Review Forms
  - Critical Thinking
  - Communication
  - Empirical & Quantitative Skills
  - Teamwork
  - Social Responsibility
  - Personal Responsibility
- WECM Course** -If needed, revise the Program SCANS Matrix and Competencies Checklist