Wharton County Junior College

Administrative Master Syllabus

Course Information

Course Title	Industrial Processes
Course Prefix, Num. and Title	PTAC 1454 Industrial Processes
Division	Division – Vocational Science
Department	Process Technology
Course Type	WECM Course
Course Catalog Description	The study of the common types of industrial processes. Processes covered will include petrochemical processes, refining processes, pulp and paper production water treatment processes, power generation utilities, food and beverage processes.
Pre-Requisites	PTAC 1410 and PTAC 1432
Co-Requisites	Enter Co-Requisites Here.

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours: Lab/Other Hours	4:3:2
Equated Pay Hours	4
Lab/Other Hours Breakdown: Lab Hours	2
Lab/Other Hours Breakdown: Clinical Hours	Enter Clinical Hours Here.
Lab/Other Hours Breakdown: Practicum Hours	Enter Practicum Hours Here.
Other Hours Breakdown	List Total Lab/Other Hours Here.

Approval Signatures

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

Additional Course Information

Topical Outline:

TOPICAL OUTLINE	DEDICATED INSTRUCTIONAL TIME
Refining and natural gas processes	Six weeks
Petrochemical processes	Four weeks
Power generation utilities	Two weeks
Water treatment processes	Two weeks
Food and beverage processes	One week
Pulp and Paper production	One week

Course Learning Outcomes:

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

Describe processes and operations typical to the processing industry.

Methods of Assessment:

Written Exams
Oral Presentation
Simulator Exercises

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

Petroleum Refining
Edition: In Nontechnical Language, 4th Edition
Author: William L. Leffler
ISBN-13: 978-1-59370-158-1

Petrochemicals
Edition: In Nontechnical Language, 4th Edition
Author: William L. Leffler
ISBN-13: 978-1-59370-216-8

Suggested Course Maximum: 20

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

Simtronics simulators

Course Requirements/Grading System:

1. Three major tests

2. Cross Disciplinary Skills (Work ethics, Safety, teamwork, housekeeping, independent thinking and problem solving, attitude, daily performance, computer proficiency)

3. Oral Presentations

4. Final examination

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

All tests, assignments, oral presentation, etc.	40%
Cross Disciplinary skills	20%
Field Trip Participation	10%
Final Exam	30%

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