

Administrative Master Syllabus

Course Information

Course Title	Nuclear Power Plant Organization and Processes
Course Prefix, Num. and Title	NUCP 1372 Nuclear Power Plant Organization and Processes
Division	Vocational Science
Department	Nuclear Power Technology
Course Type	WECM Course
Course Catalog Description	Introduces worker responsibilities specific to nuclear power plants including nuclear security, quality assurance, foreign material exclusion, radiation protection, emergency response, plant access, equipment lock out for maintenance, human performance tools and significant industry events. Includes lab.
Pre-Requisites	ENER 1350 or PTAC 1302
Co-Requisites	None

Semester Credit Hours

Total Semester Credit Hours (SCH): Lecture Hours:	3:3:1
Lab/Other Hours	
Equated Pay Hours	3.5
Lab/Other Hours Breakdown: Lab Hours	1
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
Department Head:		
Division Chair:		
VPI:		

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).

TOPICAL OUTLINE	DEDICATED INSTRUCTIONAL TIME
Foreign Material Exclusion	2
Introduction	1
Nuclear Security	2
Personal Safety	2
Quality Assurance	1
Emergency Response	1
Radiation Protection	1
Plant Access Training I	7
Plant Access Training II	6
Radiation Worker Training I	8
Radiation Worker Training II	6
Equipment Clearance Order Process	8
Significant Industry Events	3
Human Performance Tools	3

Lab Work:

Plant tours and/or power points.

The course will feature an integrated lab to enhance the lectures.

Course Learning Outcomes:

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

1. Worker responsibilities associated with employment at a nuclear power plant including working in radioactive environments.

2. Processes for problem identification & resolution.

3. Clearance tagging procedure.
4. Nuclear security & emergency preparedness.
5. Incident avoidance due to knowledge of previous industry events

Methods of Assessment:

Periodic written quizzes and exams.
Exam analysis will be performed to identify weaknesses in the program.

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

Course specific text will be specified and/or industry specific handouts will be provided

Suggested Course Maximum:

35

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

None, except lab use as needed for lecture demonstration.

Course Requirements/Grading System: Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course.

1. Quizzes, homework assignments, and class participation - 25%
2. Cross Disciplinary Skills (work ethic, safety, teamwork, housekeeping, attitude) - 25%
5. Mid-term Exam - 25%
6. Final Exam - 25%

90 to 100: A

80 to 89: B

70 to 79: C

60 to 69: D

0 to 59: F

Note: For the additional NUCP certificate, the student must complete the course with a minimum of 80%.

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



***Wharton County
Junior College***

Social Responsibility

Personal Responsibility

WECM Course – If needed, revise the Program SCANS Matrix and Competencies Checklist