

## Administrative Master Syllabus

### Course Information

|                                      |  |
|--------------------------------------|--|
| <b>Course Title</b>                  | Cooperative Education - Nuclear/Nuclear Power Technology/Technician  |
| <b>Course Prefix, Num. and Title</b> | NUCP 1480 Cooperative Education - Nuclear/Nuclear Power Technology/Technician  |
| <b>Division</b>                      | Vocational Science   |
| <b>Department</b>                    | Nuclear Power Technology   |
| <b>Course Type</b>                   | WECM Course  |
| <b>Course Catalog Description</b>    | Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. |
| <b>Pre-Requisites</b>                | Requires assignment by the Program Director  |
| <b>Co-Requisites</b>                 | None   |

### Semester Credit Hours

|  |                             |
|--|-----------------------------|
| <b>Total Semester Credit Hours (SCH): Lecture Hours:</b> | 4:1:27                      |
| <b>Lab/Other Hours</b>                                   |                             |
| <b>Equated Pay Hours</b>                                 | 4.4                         |
| <b>Lab/Other Hours Breakdown: Lab Hours</b>              | Enter Lab Hours Here.       |
| <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>                             | 27 Co-op                    |

### Approval Signatures

| Title                   | Signature | Date |
|-------------------------|-----------|------|
| <b>Department Head:</b> |           |      |
| <b>Division Chair:</b>  |           |      |
| <b>VPI:</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).

Lecture:

TOPICAL OUTLINE

2. Company Expectations including orientations, training, and plant entry procedures.
3. Job function (dependent upon student's curriculum specialization).
7. Power Plant process and physical safety, and observance of in-plant safety culture
8. Job shadowing and training.
9. Human performance.
10. Quality as related to plant /workers.
7. Weekly log of lessons learned (required for WCJC's required reporting and follow-up). DEDICATED

INSTRUCTIONAL TIME: 20 contact hours /week.

Lab Work:

None: Student's Practicum will be done in-plant.

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

Lecture:

4. Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry and will demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills, and appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.
5. Describe the operation of a power generation facility and the role of the curriculum specialization.
6. Describe the job function as it relates to the classroom lecture material.
7. Apply the principles of mathematics and physics to problems encountered in their area of specialization.
8. Apply lessons-learned of plant processes and physical safety, and observance of in-plant safety culture.
9. Apply the principles of quality within the industrial environment.
7. Perform record keeping through the weekly log of lessons learned.

**Methods of Assessment:**

Classroom presentation / report summary of weekly log of lessons learned. (Mid-term presentation only, and final presentation as part of the end-of-semester final project). Assignments,

exams and quizzes (both oral and written).

Plant Supervisor's evaluation reports.

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

Selected plant material as part of co-op requirements

**Suggested Course Maximum:**

20 / Dependent upon sponsoring Plant availability.

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

Nuclear Power Plant Co-op.

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

Instructor's Grading System

Supervisor's Evaluation (includes the following cross disciplinary skills:

notebook, attendance, punctuality, team work, cooperation, housekeeping, participation..... 75%

Coordinator's Evaluation (includes mid-term lessons learned presentation, assignments, and final presentation as part of the end-of-semester final project.....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



**Wharton County  
Junior College**

Empirical & Quantitative Skills

Teamwork

Social Responsibility

Personal Responsibility

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