**ATPT 250 Process Technology Field Experience II**
**Credit Hours:** 1
**Scheduled hours per week**
Lecture:0
Lab: 0
Other: 40

**Catalog Course Description**: A required co-op hands on experience at a partner processing facility, designed to supplement the classroom curriculum with an environment to apply the knowledge gained in the classroom; and to further enhance the understanding of the workplace environment.

**Pre-requisites:** Completion of ATPT 132, ATPT 140, ATPT 242, ATPT 244, ATPT 260

**Co-requisites:** None

**Course Learning Outcomes:**
1. Students will demonstrate understanding of basic safety rules of the processing facility
2. Students will demonstrate ability to follow a standard operating procedure.
3. Students will demonstrate general knowledge of equipment used.
5. Students will demonstrate understanding of various plant alarms and appropriate actions should one of the alarms sound.

**Topics to be studied:**
To be determined by the process facility that the student is assigned to for the co-op semesters.

**Relationship of Course to Program or Discipline Learning Outcomes**:
This co-op portion is required to complete the certificate for Chemical and Polymer Operator Technology.

| **Relationship of Course to Program Learning Outcomes:** | |
|---|---|
| **Exhibit knowledge of OSHA General Industry requirements.** | |
| **Articulate Total Quality Management concepts including customer service, variance, process capability, continuous improvement, corrective/preventive action, SPC basics, data collection, and control charts.** | |
| **Internalize the process instrumentation that a process technician/operator utilizes in performing job functions.** | x |
| **Use the various types of equipment in the process environment in a productive manner, and the interaction of the process operator/technician with it.** | x |
| **Knowledge of equipment roles and control methods for each process system.** | |
| **Demonstrate safety and the role played by operator in maintaining the system safely.** | x |
| **Understand and follow Block flow diagrams, P & ID drawings, Process Flow diagrams, 3D drawings, and Plot plans.** | |
| **Use critical thinking skills, be able to see and troubleshoot problems in the process through trending and analysis of process parameters. Use critical thinking skills, be able to see and troubleshoot problems in the process through trending and analysis of process parameters.** | x |
| | |

| | |
|---|---|
| **10/20/2017** | |

| **Relationship of Course to General Education Learning Outcomes:** | |
|---|---|
| **Composition and Rhetoric** Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements. | |
| **Science & Technology** Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions. | |
| **Mathematics & Quantitative Skills** Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts. | |
| **Society, Diversity, & Connections** Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication. | |
| **Human Inquiry & the Past**<br>Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problem-solving skills. | |
| **The Arts & Creativity**<br>Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art. | |
| **5/3/20016** | |

**Special requirements of the course:**

Physical Examination, Background Check and Drug Screen

**Prepared by**: William M. Channell

**Date**: 10/20/2017