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**Petroleum Production O.E.C.**

**Academic Assessment Plan**

**Adopted by**

**The Process Technology faculty: December 2020**

Reviewed with curriculum changes by the Academic Assessment Committee: 3/19/21

Reviewed by the Faculty Senate as an information item: 4/2/21

# Mission Statement

The Occupational Endorsement Certificate in Petroleum Production prepares students for work as an entry-level petroleum production operator.

# Program Student Learning Outcomes

Students graduating with an Occupational Endorsement Certificate in Petroleum Production will be able to:

* Describe the petroleum production operator’s duties.
* Describe the operation of various types of oil & gas well production methods.
* Identify federal agencies, state agencies, and their applicable regulations that impact safety, health, and environment concerns in petroleum production operations.
* Identify various hand tools and their safe use in petroleum production operations.
* Identify various symbols, graphics, and components used in petroleum production Piping and Instrumentation Diagrams (P&ID) and Process Flow Diagrams (PFD).

# Measures

A description of the tools used in the assessment of the program outcomes and their implementation are summarized in Table 1.

The tools and their relationships to the program outcomes are listed in Table 2.

The assessment tools may be used in total, or a sufficient number may be selected to accurately assess any given objective or outcome.

Note: Although assessment tools appear to be specific, they are just a representative sampling of what faculty might choose in any give semester or year. The assessment plan will not be rewritten each year when faculty choose new or similar tools that are not listed in the tables and appendices.

## Table 1: Association of Assessment Tools to Program Objectives

| **Samples of Measures:** **(may vary by semester, course, instructor, etc.)** **Outcomes:** | PRT A260 – Progress Test 1 | PRT A160 – Progress Test 4 | PRT A110 – Final Exam | PETR A155 – Final Exam | PETR A155 – Test 1 |
| --- | --- | --- | --- | --- | --- |
| **Outcome #1:** Describe the petroleum production operator’s duties. | **X** |  |  |  |  |
| **Outcome #2:** Describe the operation of various types of oil & gas well production methods. |  | **X** |  |  |  |
| **Outcome #3:** Identify federal agencies, state agencies, and their applicable regulations that impact safety, health, and environment concerns in petroleum production operations.  |  |  | **X** |  |  |
| **Outcome #4:** Identify various hand tools and their safe use in petroleum production operations. |  |  |  | **X** |  |
| **Outcome #5:** Identify various symbols, graphics, and components used in petroleum production Piping and Instrumentation Diagrams (P&ID) and Process Flow Diagrams (PFD).  |  |  |  |  | **X** |

## Table 2: Program Objectives Assessment Tools and Administration

**Course collected data:** Assessment data will be collected from three courses in the fall semester and two courses in the spring semester as listed below.

Direct assessment data collection sheets will be sent to appropriate faculty each semester. Faculty will provide assignment detail, rubrics, grading, and work samples to assessment committee staff for collation and initial report compilation.

|  |  |  |
| --- | --- | --- |
| **Tool** | **Outcomes** | **Schedule** |
| PRT A260 Progress Test 1 | Outcome -- 1 | Fall Semester |
| PRT A160 – Progress Test 4 | Outcome -- 2 | Fall Semester |
| PRT A110 – Final Exam | Outcome -- 3 | Fall Semester |
| PETR A155 – Final Exam | Outcome -- 4 | Spring Semester |
| PETR A155 – Test 1 | Outcome -- 5 | Spring Semester |

# Assessment Implementation & Analysis for Program Improvement

## General Implementation Strategy

Kenai Peninsula College has an Assessment Committee who will work with the staff and faculty to collect the data indicated Tables 1 and 2. This Committee also provides support for course-level assessment and other assessment activities as needed. The Assessment Committee will work with staff and faculty to assemble the data and forward it to the director of KPC for final report preparation. The final report will be reviewed by the process technology department each year.

## Method of Data Analysis and Formulation of Recommendations for Program Improvement

The faculty of the program is to meet a minimum of twice a year to review the data collected and revise/modify/expand the plan and assessment tools. These meetings should result in recommendations for program changes that are designed to enhance performance relative to the program’s objectives and outcomes. The results of the data collection, an interpretation of the results, and the recommended plan and programmatic changes are to be forwarded to the office of Academic Affairs (in the required format) by the end of May each year. A plan for implementing the recommended changes, including advertising the changes to all the program’s stakeholders, is also to be completed at the meetings.

The proposed programmatic changes may be any action or change in policy that the faculty deems as being necessary to improve performance relative to program outcomes. Recommended changes should also consider workload (faculty, staff, and students), budgetary, facilities, and other relevant constraints. A few examples of changes made by programs at UAA include:

* changes in course content, scheduling, sequencing, prerequisites, delivery methods, etc.
* changes in faculty/staff assignments
* changes in advising methods and requirements
* addition and/or replacement of equipment
* changes to facilities

## Modification of the Assessment Plan

The faculty, after reviewing the collected data and the processes used to collect it, may decide to alter the assessment plan. Changes may be made to any component of the plan, including the objectives, outcomes, assessment tools, or any other aspect of the plan. The changes are to be approved by the faculty of the program. The modified assessment plan is to be forwarded to the KPC’s Academic Review Committee, KPC Director and the UAA Academic Assessment Committee via UAA Office of Academic Affairs.