

# Assessment: Assessment Plan

## Degree Program - ENG - Petroleum Engineering (MSPE)

**CIP Code:** 14.2501.00

**Degree Program Coordinator:** Habib Menouar

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**Program Purpose Statement:** The mission of the Bob L. Herd Department of Petroleum Engineering has three elements:

To provide excellent instruction and design experience essential for graduates to enter their practice of petroleum engineering and pursue lifelong professional development.

To provide research opportunities for students that generate, communicate, and apply new knowledge for the betterment of society.

To foster a spirit of service and leadership among students and faculty and assist the public in addressing issues concerning using our resources, protecting our environment, and developing our infrastructure.

**Assessment Coordinator:** Charlotte Lee-Stockton

**Modality:** Hybrid/Blended

### Student Learning Outcome: Core Knowledge

Students will demonstrate advanced knowledge in a core area consistent with the focus of their program.

**Outcome Status:** Active

**Outcome Type:** Student Learning

**Start Date:** 06/15/2015

#### Assessment Methods

**Thesis** - The Students ability to demonstrate advanced knowledge in a core area will be assessed through responses indicated on the Petroleum Engineering Thesis Rubric completed by committee members in regards to the final presentation and project (see attached corresponding rubric). Response used to assess core knowledge include the following categories listed in the Thesis Rubric: III. Relevance and IV. Results. Students will make their final presentation and complete the project during their last semester of study. (Active)

**Criterion:** 100% of students will receive an average score of 4.0 or higher.

**Schedule:** An assessment of thesis results will occur annually at the end of each academic year.

**Related Documents:**

[RubricFormat- Thesis.docx](#)

**Student Exit Survey** - Students understanding of core areas of the program will be assessed through responses indicated on the following portions of the Student Exit Survey: Criterion 1. Core Knowledge, Questions (a)-(f). (See attached corresponding survey) (Active)

**Criterion:** Students who complete the survey will respond with an average of 4 or higher.

**Schedule:** An assessment of Student exit Survey results will occur annually, at the end of each academic year.

**Related Documents:**

[Exit\\_Interview\\_Grad\\_Prog\\_SACS\\_15.docx](#)

### Student Learning Outcome: Scholarly Communication

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Students will produce written and oral communications of quality, as consistent with the focus of their program.

**Outcome Status:** Active

**Outcome Type:** Student Learning

**Start Date:** 06/15/2015

## Assessment Methods

**Patents/Publications** - A student's ability to produce written and oral communication will be assessed by the number of publications or patents produced by a student upon graduation as indicated by the responses gathered in the Grad Student Publication questionnaire (see attached corresponding survey). (Active)

**Criterion:** 80% of all students must have at least one publication.

**Schedule:** An assessment of student patents and publications will be completed annually at the end of each academic year.

**Related Documents:**

[Exit\\_Interview\\_Grad\\_Prog\\_SG\\_15.docx](#)

**Thesis** - The Students' ability to produce written and oral communications of quality will be assessed through responses indicated on the Petroleum Engineering Thesis Rubric completed by committee members in regards to the final presentation and project (see attached corresponding rubric). Response used to assess scholarly communication include the following categories listed in the Thesis Rubric: I. Quality of Oral Communication and II. Quality of Written Thesis. Students will make their final presentation and complete the project during their last semester of study. (Active)

**Criterion:** 100% of students should score an average score of 4.0.

**Schedule:** An assessment of thesis results will occur annually at the end of each academic year.

**Related Documents:**

[RubricFormat- Thesis.docx](#)

**Student Exit Survey** - Students ability to produce written and oral communications of quality will be assessed through responses indicated on the following portions of the Student Exit Survey: Criterion 2. Scholarly Communication, Question (a). (See attached corresponding survey) (Active)

**Criterion:** Students who complete the survey will respond with an average of 4 or higher.

**Schedule:** An assessment of Student Exit Survey results will occur annually, at the end of each academic year.

**Related Documents:**

[Exit\\_Interview\\_Grad\\_Prog\\_SACS\\_15.docx](#)

## Student Learning Outcome: Research Methods and Analysis

Students will demonstrate quantitative and qualitative skills in the design, analysis, and presentation of supervised research projects that is consistent with the focus of their program.

**Outcome Status:** Active

**Outcome Type:** Student Learning

**Start Date:** 06/15/2015

## Assessment Methods

**Thesis** - The Students' ability to demonstrate quantitative and qualitative skills in analysis of supervised research will be assessed through responses indicated on the Petroleum Engineering Thesis Rubric completed by committee members in regards to the final presentation and project (see attached corresponding rubric). Response used to assess core knowledge include the following categories listed in the Thesis Rubric: III. Relevance and IV. Results. Students will make their final presentation and complete the project during their last semester of study. (Active)

**Criterion:** 100% of students will receive an average score of 4.0 or higher.

**Schedule:** An assessment of thesis results will occur annually at the end of each academic year.

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## Related Documents:

[RubricFormat- Thesis.docx](#)

**Student Exit Survey** - Students ability to demonstrate quantitative and qualitative skills in the design, analysis and presentation of supervised projects consistent with the focus of the graduate program will be assessed through responses indicated on the following portions of the Student Exit Survey: Criterion 5. Applied and Theory Based Research Methods, Questions (a)-(e). (See attached corresponding survey) (Active)

**Criterion:** Students who complete the survey will respond with an average of 4.0 or higher.

**Schedule:** An assessment of Student Exit Survey results will occur annually, at the end of each academic year.

## Related Documents:

[Exit Interview Grad Prog SACS 15.docx](#)

## Student Learning Outcome: Professionalism

Students will know and participate in the intellectual and organizational aspects of the profession as applicable to the major area of study including the ethical conduct of research.

**Outcome Status:** Active

**Outcome Type:** Student Learning

**Start Date:** 06/30/2015

### Assessment Methods

**Professional Development Activities** - Professionalism will be measured by the frequency of professional conference attendance made by students during their completion of their degree program. (Active)

**Criterion:** 80% of students must attend 1 or more professional conferences.

**Schedule:** An assessment of professional conference attendance will occur annually at the end of each academic year.

**Employment** - The rate of job placement for students will be assessed through responses indicated on the following portions of the Student Exit Survey: Pg. 9 "Company you will be employed by:" (Active)

**Criterion:** 75% of students will attain permanent employment upon graduating (not counting students who have indicated they will pursue a Ph.D.).

**Schedule:** An assessment of Student Exit Survey results regarding employment will occur annually, at the end of each academic year.

**Student Exit Survey** - Students level of professionalism will be assessed through responses indicated on the following portions of the Student Exit Survey: Criterion 3. Professionalism, Questions (a)-(b). (See attached corresponding survey) (Active)

**Criterion:** Students who complete the survey will respond with an average of 4 or higher.

**Schedule:** An assessment of Student Exit Survey results will occur annually, at the end of each academic year.

## Related Documents:

[Exit Interview Grad Prog SACS 15.docx](#)

## Student Learning Outcome: Pedagogy

Students will participate in classroom pedagogy consistent with undergraduate education in petroleum engineering.

**Outcome Status:** Active

**Outcome Type:** Student Learning

**Start Date:** 07/16/2015

### Assessment Methods

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**Student Exit Survey** - Pedagogy of the graduate program will be assessed through responses indicated on the following portions of the Student Exit Survey: Criterion 4. Faculty/Pedagogy, Questions (a)-(b). (See attached corresponding student survey) (Active)

**Criterion:** Students who complete the survey will respond with an average of 4 or higher.

**Schedule:** An assessment of Student Exit Survey results will occur annually, at the end of each academic year.

**Related Documents:**

[Exit\\_Interview\\_Grad\\_Prog\\_SACS\\_15.docx](#)

**Survey - Student** - Pedagogy of the graduate program will be assessed through responses indicated on the following portions of the Student Exit Survey: Criterion 4. Faculty/Pedagogy, Questions (c)-(e). (See attached corresponding student survey). (Active)

**Criterion:** Students who complete the survey will respond with an average of 4.0 or higher.