

Assessment: Assessment Plan

Degree Program - ENG - Petroleum Engineering (PHD)

CIP Code: 14.2501.00

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Program Purpose Statement: 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: Fully Online (86-99% Online)

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

Qualifying Exam - Students understanding of the core areas of the program will be assessed through results collected from students' Qualifying Exams which consists of written and oral examinations in the four core areas in Petroleum Engineering (Drilling, Production, Reservoir and Formation Evaluation). While students are allowed to complete the Qualifying Exam twice during their degree program, only the first set of results will be used for this assessment. (Active)

Criterion: 70% of students will successfully complete 3 of the 4 areas of the Qualifying Exam.

Schedule: An assessment of the Qualifying Exam results will be completed annually at the end of each academic year.

Related Documents:

[Qualifying Exam Results 2019.xlsx](#)

Dissertation - The Students' ability to demonstrate advanced knowledge in a core area will be assessed through responses indicated on the Petroleum Engineering Dissertation Rubric completed by committee members in regards to the final presentation and project (see attached Dissertation Rubric). Responses used to assess core knowledge include the following categories listed in the Dissertation 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 dissertation outcome results will be completed annually at the end of each academic year.

Related Documents:

[RubricFormat- Dissertation.docx](#)

Survey - Student - Students understanding of core areas of the program will be assessed through responses indicated on the

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following portions of the Student Exit Survey: Criterion 1. Core Knowledge, Questions (a)-(f) (See attached Student Exit 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 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

Dissertation - The Students' ability to demonstrate quantitative and qualitative skills in analysis of supervised research will be assessed through responses indicated on the Petroleum Engineering Dissertation Rubric completed by committee members in regards to the final presentation and project (see attached Dissertation Rubric). Response used to assess core knowledge include the following categories listed in the Dissertation 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 should score an average score of 4.0.

Schedule: An assessment of dissertation results will be completed annually at the end of each academic year.

Related Documents:

[RubricFormat- Dissertation.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 Student Exit 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: Independent Research

Students will conduct independent research resulting in an original contribution to knowledge in the focused areas of their program.

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 06/15/2015

Assessment Methods

Dissertation - The Students' ability to conduct independent research resulting in original contribution to the focus areas of the program will be assessed through responses indicated on the Petroleum Engineering Ph.D. Proposal Rubric completed by committee members in regards to the final presentation and project (see attached corresponding Proposal Rubric). Response(s) used to assess independent research includes the following categories: I. Level of Complexity and IV. Critical Thinking. (Active)

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

Schedule: An assessment of dissertation proposal results will be completed annually at the end of each academic year.

Related Documents:

[RubricFormat-Proposal.docx](#)

Dissertation - The Students' ability to complete independent research resulting in an original contribution to the focus areas of the program will be assessed through responses indicated on the Petroleum Engineering Dissertation Rubric completed by committee members in regards to the final presentation and project (see attached corresponding Dissertation Rubric). Response(s) used to assess independent research and original contribution include the following categories listed in the Dissertation Rubric: III. Relevance. 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 dissertation proposals will be completed annually at the end of each academic year.

Related Documents:

[RubricFormat- Dissertation.docx](#)

Student Learning Outcome: Scholarly Communication

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 student's Dissertation Committee Chair and as indicated by the student's response to the Student Exit Survey (see attached corresponding survey).

(Active)

Criterion: 80% of students will have 3 or more patents or publications.

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](#)

Dissertation - The Students' ability to produce written and oral communications of quality will be assessed through responses indicated on the Petroleum Engineering Dissertation Rubric completed by committee members in regards to the final presentation and project (see attached Dissertation Rubric). Response used to assess scholarly communication include the following categories listed in the Dissertation Rubric: I. Quality of Oral Communication and II. Quality of Written Dissertation. 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 of 4.0.

Schedule: An assessment of dissertation results will be completed annually at the end of each academic year.

Related Documents:

[RubricFormat- Dissertation.docx](#)

Conference Presentation - Scholarly communication will be measured by the number of conference presentations completed by students during the completion of their degree program. (Active)

Criterion: 80% of students will complete at least one conference presentation before graduating.

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

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 Student Exit Survey) (Active)

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

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

Related Documents:

[Exit Interview Grad Prog SACS_15.docx](#)

Dissertation - The Students' ability to produce written and oral communication of quality will be assessed through responses indicated on the Petroleum Engineering Ph.D. Proposal Rubric completed by committee members in regards to the Ph.D. Proposal Defense. Response used to assess scholarly communication include the following categories listed in the Dissertation Proposal Rubric: II. Quality of Written Communication and III. Quality of Oral Communication. (See attached Proposal Rubric) (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-Proposal.docx](#)

Student Learning Outcome: Pedagogy

Students will participate in classroom pedagogy consistent with undergraduate education in the associated major.

Outcome Status: Active

Outcome Type: Student Learning

Start Date: 06/15/2015

Assessment Methods

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 Student Exit 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 Survey 2017-2018.xlsx](#)

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 Student Exit Survey) (Active)

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

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: 06/15/2015

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Assessment Methods

Professional Development Activities - Student's professionalism will be assessed through participation in the graduate seminar attended by all graduate students. (Active)

Criterion: 75% of students must present once a year during graduate seminar course after qualifying exam.

Schedule: An assessment of seminar participation will occur annually at the end of each academic year.

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

Criterion: 80% of students must attend 2 or more professional conferences.

Schedule: An assessment of professional conference attendance of students 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.

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

Related Documents:

[Exit_Interview_Grad_Prog_SG_15.docx](#)

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 Student Exit 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](#)

Dissertation - Students' professionalism will be assessed through responses indicated on the Petroleum Engineering Ph.D. Proposal Rubric completed by committee members in regards to the Ph.D. Proposal Defense (see attached Proposal Rubric). Response(s) used to assess professionalism include the following category listed in the Ph.D. Proposal: V. Planning. Students must include a specific time line for completion of the research, publications and a budget required for the research. (Active)

Criterion: 100% of students should score 4.0 and up.

Schedule: An assessment of Ph.D. Proposals will occur annually at the end of each academic year.

Related Documents:

[RubricFormat-Proposal.docx](#)