UNIVERSITY OF ALASKA FAIRBANKS

Student Learning Outcomes Assessment Plan

Master of Science in Petroleum Engineering

College of Engineering and Mines

Updated November 8, 2022

Expanded Statement of Institutional Purpose	Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
MISSION STATEMENT: The mission of the Petroleum Engineering Program is to provide its students with quality education and training in the field of Petroleum Engineering through effective teaching, research and public service, with emphasis on Alaskan petroleum resources. **GOAL STATEMENT:** To be the foremost PE program dedicated to the creation of innovative solutions for the extraction and the sustainable development of energy resources in the circumpolar North and beyond.	(1) Students will demonstrate a broad appreciation of the core disciplines of petroleum engineering, i.e., Drilling, Reservoir and Production.	A comprehensive exam that will test the three broad technical areas in petroleum engineering—drilling, production and reservoir engineering (Pass or Fail)	Graduate committee evaluation at the end of the students' second semester and / or Graduate committee evaluation approximately one semester before final defense and / or Graduate committee evaluation during final defense
	(2) Students will demonstrate an ability to conduct a proper literature review and relate previous work to current challenges.	Evaluation of thesis/project report (Pass or Fail)	Graduate committee evaluation approximately one semester before final defense and / or Graduate committee evaluation during final defense
	(3) Students will be able to apply principles of engineering, science, and mathematics to identify, formulate, provide insight into or solve a petroleum engineering problem.	Evaluation of thesis/project report (Pass or Fail)	Graduate committee evaluation during final defense

Submitted by: Obadare Awoleke and Abhijit Dandekar

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	(4) Students will demonstrate the ability to use or develop modern engineering tools.	Class projects and/or Evaluation of thesis/project report (Pass or Fail)	Class instructor and/or Graduate committee evaluation during final defense
	(5) Students will demonstrate good oral and written communication skills.	Evaluation of thesis/project report (Pass or Fail)	Graduate committee evaluation during final defense