

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
 Environmental Chemistry Ph.D. Program

MISSION STATEMENT:

The Environmental Chemistry Program provides expertise and training in the application of physical and analytical chemistry to fields that are of critical importance to energy, sustainability, resource utilization and environmental quality. Students are provided core training in pure chemistry sub-disciplines and environmental applications to prepare them for careers in the environmental technology and analysis sectors, federal, state and local government agencies, and academic research laboratories.

GOAL STATEMENT:

Maintain a program of high quality and produce scientists with the training and expertise required to solve current problems and anticipate future challenges. The doctorate program's goal is for students to contribute new knowledge in their chosen area and be able to work as independent researchers.

Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
Graduates attain a level of technical ability and knowledge to function as professionals in their discipline.	Students will demonstrate their abilities and progress through presentations, manuscripts, and annual committee meetings.	Annual graduate committee meetings will include questions to assess student progress toward the stated objective (Form "GradProgramAssessmentForm"). Annual progress reports will be reviewed by faculty to assure program goals are being met.
Doctoral graduates demonstrate that they can independently identify a problem and devise appropriate methods for its solution, contributing original knowledge to that field.	Graduates should demonstrate ability to develop new research ideas. Graduates will make significant contributions to the peer-reviewed literature.	Written comprehensive exam results will be reviewed by faculty. Oral comprehensive examinations quality will be assessed "GradProgramAssessmentForm". Thesis defense quality will be assessed "GradProgramAssessmentForm". Doctoral graduates should have at least one first-authored publication ready for submission at time of defense. Our goal is 2-4+ publications, depending upon scope, and as defined by the committee.
Communication/presentation skills are consistent with professional standards.	Graduate students will have experience in giving oral presentations at disciplinary conferences, preparation of peer-reviewed manuscripts and development of research proposals.	Survey of graduate students and student committees (including oral defenses and exams) will include questions to assess their progress towards the stated objective (Form "GradProgramAssessmentForm"). Assessments of student performances seminar courses will be compiled and reviewed annually. List of peer reviewed publications and conference presentations will be compiled and reviewed annually.
Graduates obtain employment or continue education in the field following graduation.	90% of students will be employed or continue education in a related field one year after graduation	Graduates will be surveyed (Form "Graduate Student Exit Interview") and faculty will be surveyed annually regarding recent graduates.