

**UNIVERSITY OF ALASKA FAIRBANKS**  
**Student Learning Outcomes Assessment Plan**  
 Biochemistry and Molecular Biology Ph.D. Program

**MISSION STATEMENT:**

The Biochemistry and Molecular Biology graduate program seeks to provide scientists and scholars with the technical training and insight to understand the natural environment from a chemical and biochemical perspective with emphasis on Northern regions. Skills are to be developed by investigating fundamental and applied problems associated with questions about the Alaskan environment, resource development, and public health. Also students will gain knowledge and skills in teaching and communication of chemical principles.

**GOAL STATEMENT:**

Maintain a program of the quality required to produce leaders and teachers that can solve technological problems of the present and anticipate critical scientific challenges in the future.

<b>Intended Objectives/Outcomes</b>	<b>Assessment Criteria and Procedures</b>	<b>Implementation (what, when, who)</b>
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.