

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
Climate and Environmental Change B.S.
 College of Natural Science and Mathematics
 October 30 2025

MISSION STATEMENT: The Biology and Wildlife Department educates students from diverse backgrounds worldwide about living systems with an emphasis on the circumpolar North by fostering intellectual inquiry, problem solving, and creativity through coursework and research.

GOAL STATEMENT: The Biology and Wildlife Department aims to provide its students a strong foundation in biological knowledge; to empower them through course experiences, research, and inquiry to think creatively, flexibly, and critically; and to prepare them to achieve their future educational and professional goals.

Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
Scientific Proficiency Demonstrate mastery of scientific knowledge in at least one specific discipline related to climate and environmental change	Students demonstrate knowledge of science by showcasing and annotating an example of written or project-based work in the ePortfolio that illustrates ability to engage with advanced scientific concepts and reasoning in a context relevant to climate and environmental change	Each intended outcome will be scored according to a rubric by members of a committee composed of faculty from several different disciplines and the scores for each intended outcome averaged across reviewers. The identity of evaluators will be consistent across students within a year. Aggregate results of the evaluation (e.g., number of students with "adequate" or higher performance in all areas) will exceed 80% each year
Effective Communication Demonstrate effective communication both in writing and speech in accordance with professional norms on issues relevant to environmental change	Students demonstrate knowledge of science by showcasing and annotating an example of their written or project-based work in the ePortfolio that illustrates their ability to engage with advanced scientific concepts and reasoning in a context relevant to climate and environmental change	
Technical and Data Skills Apply technical or data skills to analyzing and solving problems related to environmental change	Students demonstrate technical and/or data skills by showcasing and annotating an example of their problem-solving or project based work within the ePortfolio	
Science & Society Integration Demonstrate skills for civic engagement by bridging science and policy, integrating an awareness of social, cultural, and scientific issues relevant to human decision-making about the environment	Students will demonstrate their ability to integrate science with policy, social, and/or humanistic issues by showcasing and annotating an example of their their work within the ePortfolio	
Synthesis Synthesize and reflect on knowledge and skills learned about climate and environmental change across courses and course-related experiences	Students will reflect on the aggregate of their learning across disciplines within a final section of the ePortfolio	