

UNIVERSITY OF ALASKA FAIRBANKS
Student Learning Outcomes Assessment Plan
Ph.D. Fisheries Science
College of Fisheries and Ocean Sciences
DRAFT REVISION AY25/26

Expanded Statement of Institutional Purpose	Intended Objectives/Outcomes	Assessment Criteria and Procedures	Implementation (what, when, who)
CFOS MISSION: The College of Fisheries and Ocean Sciences supports the needs of Alaska and its communities, the nation and the international community through research and training the next generation of scholars and leaders in the wise use of Alaskan and Arctic aquatic natural resources. CFOS VISION: As one of the largest combined research and academic organizations in the University of Alaska system in terms of personnel and budget, and one of the most diverse colleges in both geographic reach and academic mission, we seek to be a: -World-class ocean and inland aquatic research and educational organization, recognized as such by peers in the academic community and funding agencies. -Primary source of knowledge, operational expertise, and basic and applied research to manage freshwater, estuarine and ocean resources in Alaska, including the Arctic.	1. Communication 1a. Written: Students should be able to develop a written dissertation that includes publishable scientific papers suitable for the peer-reviewed literature using clear language, logic, and convincing arguments. 1b. Oral: Students should be able to deliver clear and effective oral presentations for a professional audience and respond to questions with confidence. 1c. Discourse: Students should represent an expert in their novel area of research, capable of high-level scholarly discourse with other subject-matter experts, demonstrating a clear analysis of the benefits and limitations of their research in the context of the respective field and its literature.	<u>Instruments:</u> Written proposal, written Ph.D. dissertation. <u>Min. Standard:</u> 80% of graduating students will write at the level of a competent Ph.D. level fisheries professional. <u>Instruments:</u> Public presentation of dissertation. <u>Min. Standards:</u> 80% will present their dissertation at the level of a competent Ph.D. level fisheries professional. 80% will successfully complete their degree. <u>Instruments:</u> Committee survey. <u>Min. Standards:</u> 80% of students will receive either (1) strong compared to a typical Ph.D. level professional or (2) competent compared to a typical Ph.D. level professional, in the areas of "logical thinking" and "ability to answer questions" within the post-defense Outcomes Assessment.	Advisory Committee will rate students on a scale of 1-4 in terms of writing ability at the dissertation defense. Department Head or designee will review dissertation using similar criteria. Advisory Committee will rate students on a scale of 1-4 in terms of clarity of verbal presentation at the dissertation defense. Advisory committee will grade dissertation defense as pass, conditional pass or fail. Academics Office will track success rates and scores.
	2. Technical Knowledge Students should display mastery of relevant knowledge of fishery science in a range of subject areas identified by the committee. Students should be experts in the subject area of their dissertation.	<u>Instruments:</u> Comprehensive Exam. <u>Min. Standard:</u> 80% of students will pass their Comprehensive Exam within 3 years of admission. <u>Instruments:</u> Written dissertation.	Advisory Committee will grade comprehensive exam as pass, conditional pass, or fail. Advisory Committee will rate technical knowledge on a scale of 1-4 post dissertation defense. Advisory Committee will rate familiarity with relevant literature

-Source of well-trained and highly motivated graduates to staff organizations and agencies, in particular those in Alaska responsible for management of Alaskan and Arctic waters and their renewable resources. -College of choice for faculty and students with interest in waters off Alaska, including the Arctic, and their renewable resources. -Trusted steward of state and national research and educational facilities.		<u>Min. Standard:</u> 80% will demonstrate technical knowledge of the dissertation subject at the level of a competent Ph.D. level fisheries professional; 80% will demonstrate familiarity with relevant literature at the level of a competent fisheries professional.	on a scale of 1-4 post dissertation defense. Academics Office will track success rates and scores.
	3. Problem Solving 3a. Logical Thinking: Students should be able to identify assumptions, evaluate arguments and draw well-supported conclusions. 3b. Analytical: Demonstrate mastery in data collection, analysis, interpretation and reporting. 3c. Autonomy: Students should demonstrate an ability to independently identify research needs, develop hypotheses and research objectives, and plan and implement research capable of directly addressing those needs.	<u>Instruments:</u> Comprehensive exam; written dissertation; oral defense. <u>Min. Standard:</u> 80% of students will pass their Comprehensive Exam within 3 years of admission. 80% will demonstrate ability to think logically at the level of a competent Ph.D. level fisheries professional. <u>Instruments:</u> Written dissertation; public & oral defense. <u>Min. Standards:</u> 80% will present their data and analyses at the level of a competent Ph.D. level fisheries professional in writing and during public & oral defense. <u>Instruments:</u> Committee survey. <u>Min. Standards:</u> 80% of students will receive either (1) strong compared to a typical Ph.D. level professional or (2) competent compared to a typical Ph.D. level professional, in the areas of "logical thinking" and "ability to answer questions" within the post-defense Outcomes Assessment.	Advisory Committee will grade Comprehensive Exam as pass, conditional pass, or fail, based in part on ability to logically think through arguments. Advisory Committee will rate 'logical thinking' on scale of 1-4 post dissertation defense. Advisory Committee will rate quantitative ability on scale of 1-4 postdissertation defense. Academics Office will track success rates and scores.