## UNIVERSITY OF ALASKA FAIRBANKS Student Learning Outcomes Assessment Plan

College of Fisheries and Ocean Sciences M.S. in Marine Biology

## Department of Marine Biology CFOS

Date: 2018

MISSION STATEMENT:  1) Graduates will be competent scientists, and adequately prepared to succeed in the job market in their chosen field.  All students must pass a Comprehensive Exam assessing interdisciplinary knowledge in the field of Marine Biology of the decitated to providing exceptional high-latitude research and education experiences and support for our students.  CORE VALUES:  CORE VALUES:  A core part of Alaska: Alaska's marine ecosystems are the focal point of our research and experiences, and we emphasize field work and relevance to stakeholders.  Core team values: Our collaborative team is dedicated to research, service, education and balancing a strong work ethic with a good sense of humor and love of life.  Education at our core: We are on a quest for knowledge, are committed to education, and strive to provide exceptional high-latitude experiences and support for our students.  A core team values cour collaborative team is dedicated to research, service, education and balancing a strong work ethic with a good sense of humor and love of life.  Education at our core: We are on a quest for knowledge, are committed to education, and strive to provide experiences and support for our students.  Students will present their thesis is a public forum, followed by a closed-session questioning by the student's advisory committee. Quality of the spentage of the spe	Expanded Statement of	Intended Objectives/Outcomes	Assessment Criteria and	Implementation
scientists, and adequately prepared to market in their Marine Biology is dedicated to providing exceptional high-latitude research and education experiences and support for our students.  **CORE VALUES:**  **CORE VALUES:**  **A core part of Alaska: Alaska's marine ecosystems are the focal point of our research and education endeavors, and we emphasize field work and relevance to stakeholders.  **Core team values:**  **Core team valu	Institutional Purpose		Procedures	(what, when, who)
College of Fisheries and Ocean Sciences. This can include presentations elsewhere within UAF. 50% of graduates will  The form allows to evaluate and quantify each student's communication skills and the scientific content of the oral thesis	Institutional Purpose MISSION STATEMENT:  The faculty at the Department of Marine Biology is dedicated to providing exceptional highlatitude research and education experiences and support for our students.  CORE VALUES:  A core part of Alaska: Alaska's marine ecosystems are the focal point of our research and education endeavors, and we emphasize field work and relevance to stakeholders.  Core team values: Our collaborative team is dedicated to research, service, education and balancing a strong work ethic with a good sense of humor and love of life.  Education at our core: We are on a quest for knowledge, are committed to education, and strive to provide exceptional high-latitude experiences and support for our	Graduates will be competent scientists, and adequately prepared to succeed in the job market in their	All students must pass a Comprehensive Exam assessing interdisciplinary knowledge in the field of Marine Biology and in-depth knowledge of their field of specialization. It is expected that 50% of our students will pass this exam after the first try and that 95% will pass after the second.  Students are required to write a thesis interpreting the results of original research. The quality of the research and written thesis is equal to what would be expected from a peer-reviewed journal article. It is expected that 75% of our students will submit their thesis research to a peer-reviewed journal for publication.  Students will present their thesis in a public forum, followed by a closed-session questioning by the student's advisory committee. Quality of thesis presentations will be equal to what is expected from a presentation at a scientific conference. 90% of our students will give presentations that are deemed conference quality by their peers.  Students will present at least one public presentation on their thesis research outside of the College of Fisheries and Ocean Sciences. This can include presentations elsewhere within	(what, when, who)  The Department of Marine Biology will collect quantifiable data concerning comprehensive exam outcomes with Google form "Comprehensive Exam". The form is designed so that quantifiable outcomes are automatically collated and available for SLOA. Data from these forms will be evaluated each year, collectively, by the Department of Marine Biology Faculty. Every three years, the Department of Marine Biology Faculty will look for temporal trends in performance on exams from the past five years.  The Department of Marine Biology Chair will assess research competence and written communication skills by reviewing all M.S. theses submitted each year. The Chair will complete Google form "Thesis Evaluation", which will automate the collection of quantifiable outcomes. The Department of Marine Biology Faculty will review the results from these evaluations.  Thesis presentation quality will be assessed with Department of Marine Biology Google form "Thesis Defense", which will be completed by the audience during the defense, aiming for representation in the responses by graduate students and faculty. The form allows to evaluate and quantify each student's communication skills and the

on a peer-reviewed scientific Faculty annually. article within 3 years of graduating. Upon graduation, each student will be asked to fill out the 80% of graduates will be Department of Marine Biology satisfied, overall, with the Google form "Exit Interview". The education they received through questionnaire includes GPMSL. quantifiable questions about satisfaction with their education 80% of graduates seeking as well as research employment or continued accomplishments (presentations, education in marine sciences. publications). Every year, the or other fields relevant to their Department of Marine Biology education, will succeed within Faculty will review these data to one year of graduation. examine their overall success. Every three years, the 80% of graduates will find that Department of Marine Biology the education they received Faculty will examine the data for through their Marine Biology trends in employment success or degree prepared them well for type. their continued professional endeavors. One and three years after graduation, Department of Marine Biology faculty will ask graduates to complete a "Post-Graduation Questionnaire" (prepared as a Google form by the Department of Marine Biology), addressing their job search, employment, and satisfaction with the education received through the Department of Marine Biology. Completed forms will be reviewed by the Department of Marine Biology Faculty annually. The Comprehensive Exams 2) Graduates will be prepared to All students must pass an oral teach Marine Sciences at the administered during each year Comprehensive Exam will be evaluated, collectively, by community college or lower division assessing interdisciplinary the Department of Marine Biology undergraduate level. knowledge in the field of Marine Biology, and in-depth Faculty. Every three years, the knowledge of their field of Department of Marine Biology specialization. It is expected faculty will look for temporal that 50% of our students will trends in performance on exams pass this exam after the first try from the past five years. and that 95% will pass after the second. The Marine Biology Department Chair will assess research Students are required to pass competence and written an oral defense of the thesis. communication skills by reviewing which includes a public all M.S. theses submitted each presentation. year. The Department of Marine Students will present at least Biology Faculty will review these one public presentation on their evaluations. dissertation research outside of SFOS. This can include A representative of the presentations elsewhere within Department of Marine Biology UAF Faculty will prepare a written

evaluation of each student's

50% of graduates will submit a manuscript based on their Master's research to a peer-reviewed scientific journal within 1 year of graduating. 25% of graduates will be first author on a peer-reviewed scientific article within 3 years of graduating

80% of graduates seeking employment or continued education in marine sciences, or other fields relevant to their education, will succeed within one year of graduation 80% of graduates will be satisfied, overall, with the education they received through GPMSL.

communication skills and the scientific content of the oral thesis defense. These evaluations will be reviewed by the Department of Marine Biology Faculty annually. The Department of Marine Biology will compile information on graduates' presentation and publication record. Every year, the Department of Marine Biology Faculty will review these data to examine their overall success.

One and three years after graduation, Department of Marine Biology faculty will ask graduates to complete a "Post-Graduation Questionnaire" (prepared as a Google form by the Department of Marine Biology), addressing their job search, employment, and satisfaction with the education received through the Department of Marine Biology. Completed forms will be reviewed by the Department of Marine Biology Faculty annually.

3) Graduates will be prepared to enter a Ph.D. program.

All students must pass an oral Comprehensive Exam assessing broad disciplinary knowledge, the ability to apply that knowledge to interdisciplinary problems in the marine sciences, and in-depth knowledge of the field of specialization. It is expected that 50% of our students will pass this exam after the first try and that 95% will pass after the second.

Students are required to write a thesis interpreting the results of original research

Students are required to pass an oral defense of the thesis, which includes a public presentation.
Students will present at least one public presentation on their dissertation research outside of SFOS. This can include presentations elsewhere within LIAF

50% of graduates will submit a manuscript based on their Master's research to a peerThe Comprehensive Exams administered during each year will be evaluated, collectively, by the Department of Marine Biology Faculty. Every three years, the Department of Marine Biology faculty will look for temporal trends in performance on exams from the past five years.

The Marine Biology Department Chair will assess research competence and written communication skills by reviewing all M.S. theses submitted each year. The Department of Marine Biology Faculty will review these evaluations.

A representative of the Department of Marine Biology Faculty will prepare a written evaluation of each student's communication skills and the scientific content of the oral thesis defense. These evaluations will be reviewed by the Department of Marine Biology Faculty annually. The Department of Marine Biology will compile information on graduates' presentation and publication record. Every year,

reviewed scientific journal within the Department of Marine Biology 1 year of graduating. 25% of Faculty will review these data to graduates will be first author on examine their overall success. a peer-reviewed scientific article within 3 years of graduating One and three years after graduation, Department of Marine 80% of graduates seeking Biology faculty will ask graduates employment or continued to complete a "Post-Graduation education in marine sciences. Questionnaire" (prepared as a or other fields relevant to their Google form by the Department of Marine Biology), addressing education, will succeed within their job search, employment, and one year of graduation satisfaction with the education 80% of graduates will be received through the Department satisfied, overall, with the of Marine Biology. Completed education they received through forms will be reviewed by the **GPMSL** Department of Marine Biology Faculty annually. 4) Graduates will have excellent oral The Comprehensive Exams All students must pass a and written communication skills. Comprehensive Exam administered during each year assessing broad disciplinary will be evaluated, collectively, by knowledge, the ability to apply the Department of Marine Biology that knowledge to Faculty. Every three years, the interdisciplinary problems in the Department of Marine Biology marine sciences, and in-depth faculty will look for temporal knowledge of the field of trends in performance on exams specialization. from the past five years. Students are required to write a The Marine Biology Department thesis interpreting the results of Chair will assess research original research competence and written communication skills by reviewing Students are required to pass all M.S. theses submitted each an oral defense of the thesis. year. The Department of Marine which includes a public Biology Faculty will review these evaluations. presentation. Students will present at least one public presentation on their A representative of the dissertation research outside of Department of Marine Biology SFOS. This can include Faculty will prepare a written presentations elsewhere within evaluation of each student's UAF communication skills and the scientific content of the oral thesis 50% of graduates will submit a

80% of graduates seeking employment or continued education in marine sciences, or other fields relevant to their

manuscript based on their

Master's research to a peer-

1 year of graduating. 25% of

within 3 years of graduating

reviewed scientific journal within

graduates will be first author on

a peer-reviewed scientific article

A representative of the Department of Marine Biology Faculty will prepare a written evaluation of each student's communication skills and the scientific content of the oral thesis defense. These evaluations will be reviewed by the Department of Marine Biology Faculty annually. The Department of Marine Biology will compile information on graduates' presentation and publication record. Every year, the Department of Marine Biology Faculty will review these data to examine their overall success.

One and three years after graduation, Department of Marine

education, will succeed within Biology faculty will ask graduates to complete a "Post-Graduation one year of graduation Questionnaire" (prepared as a 80% of graduates will be Google form by the Department satisfied, overall, with the of Marine Biology), addressing education they received through their job search, employment, and **GPMSL** satisfaction with the education received through the Department of Marine Biology. Completed forms will be reviewed by the Department of Marine Biology Faculty annually. The Comprehensive Exams 5) Graduates will have mastery of All students must pass a the core knowledge of marine Comprehensive Exam administered during each year science, and be an expert in the assessing broad disciplinary will be evaluated, collectively, by subject area of their thesis. knowledge, the ability to apply the Department of Marine Biology that knowledge to Faculty. Every three years, the interdisciplinary problems in the Department of Marine Biology marine sciences, and in-depth faculty will look for temporal knowledge of the field of trends in performance on exams specialization. from the past five years. Students are required to write a The Marine Biology Department thesis interpreting the results of Chair will assess research original research competence and written communication skills by reviewing Students are required to pass all M.S. theses submitted each an oral defense of the thesis, year. The Department of Marine which includes a public Biology Faculty will review these evaluations. presentation. Students will present at least one public presentation on their A representative of the dissertation research outside of Department of Marine Biology Faculty will prepare a written SFOS. This can include evaluation of each student's presentations elsewhere within UAF communication skills and the scientific content of the oral thesis 50% of graduates will submit a defense. These evaluations will manuscript based on their be reviewed by the Department of Master's research to a peer-Marine Biology Faculty annually. reviewed scientific journal within The Department of Marine 1 year of graduating. 25% of Biology will compile information on graduates' presentation and graduates will be first author on a peer-reviewed scientific article publication record. Every year, within 3 years of graduating the Department of Marine Biology Faculty will review these data to 80% of graduates seeking examine their overall success. employment or continued One and three years after education in marine sciences. or other fields relevant to their graduation, Department of Marine Biology faculty will ask graduates education, will succeed within to complete a "Post-Graduation one year of graduation Questionnaire" (prepared as a 80% of graduates will be Google form by the Department of Marine Biology), addressing satisfied, overall, with the their job search, employment, and education they received through **GPMSL** satisfaction with the education

		received through the Department of Marine Biology. Completed forms will be reviewed by the Department of Marine Biology Faculty annually.
Graduates will be capable of accomplishing rigorous scientific research.	All students must pass a Comprehensive Exam assessing broad disciplinary knowledge, the ability to apply that knowledge to interdisciplinary problems in the marine sciences, and in-depth knowledge of the field of specialization.	The Comprehensive Exams administered during each year will be evaluated, collectively, by the Department of Marine Biology Faculty. Every three years, the Department of Marine Biology faculty will look for temporal trends in performance on exams from the past five years.
	Students are required to write a thesis interpreting the results of original research.  Students are required to pass an oral defense of the thesis, which includes a public presentation Students will present at least	The Marine Biology Department Chair will assess research competence and written communication skills by reviewing all M.S. theses submitted each year. The Department of Marine Biology Faculty will review these evaluations.
	one public present at least one public presentation on their dissertation research outside of SFOS. This can include presentations elsewhere within UAF	A representative of the Department of Marine Biology Faculty will prepare a written evaluation of each student's communication skills and the scientific content of the oral thesis defense. These evaluations will
	manuscript based on their Master's research to a peer- reviewed scientific journal within 1 year of graduating. 25% of graduates will be first author on a peer-reviewed scientific article within 3 years of graduating  80% of graduates seeking	be reviewed by the Department of Marine Biology Faculty annually. The Department of Marine Biology will compile information on graduates' presentation and publication record. Every year, the Department of Marine Biology Faculty will review these data to examine their overall success.
	employment or continued education in marine sciences, or other fields relevant to their education, will succeed within one year of graduation.	One and three years after graduation, Department of Marine Biology faculty will ask graduates to complete a "Post-Graduation Questionnaire" (prepared as a
	80% of graduates will be satisfied, overall, with the education they received through GPMSL	Google form by the Department of Marine Biology), addressing their job search, employment, and satisfaction with the education received through the Department of Marine Biology. Completed forms will be reviewed by the Department of Marine Biology Faculty annually.
Graduates will be satisfied with the quality of their educational and research experiences.	80% of graduates seeking employment or continued education in marine sciences,	One and three years after graduation, Department of Marine Biology faculty will ask graduates

	or other fields relevant to their education, will succeed within one year of graduation  80% of graduates will be satisfied, overall, with the education they received through GPMSL	to complete a "Post-Graduation Questionnaire" (prepared as a Google form by the Department of Marine Biology), addressing their job search, employment, and satisfaction with the education received through the Department of Marine Biology. Completed forms will be reviewed by the Department of Marine Biology Faculty annually.
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