

Assessment Plan Template

Graduate Programs

Degree: Marine Science, Master of Science		CIP Code: 40.0607
<p>Program Mission Statement: The primary mission of the College is to conduct basic and applied research in ocean science. Here, ocean science is defined by application of the traditional fields of science to both the biology, chemistry, geology, and physics of the marine environment and to the interactions between the marine environment and the adjoining atmosphere and land systems - presently and throughout earth's history. Included in the primary ocean science mission is the development of new technologies and tools for exploring the coupled ocean-atmosphere-land systems.</p>		
<p>Graduates of this program will be able to demonstrate the following:</p>		
<p>Outcome 1 – Thesis Proposal</p>		
Outcome	Students completing the M.S. Degree in Marine Science will demonstrate the ability to formulate a significant scientific problem, design an approach to solving the problem, and support the proposed research with appropriate and in-depth oceanographic or other scientific background. Students should integrate core interdisciplinary concepts of Marine Science/Oceanography into their research proposal.	
Methods of Assessment	Examining committees, comprised of a minimum of three professors or members of equivalent rank outside of USF, will judge the student’s written Thesis Proposal based on the student’s ability (1) to provide appropriate and in-depth oceanographic or other scientific background; (2) knowledge of relevant scientific facts, and (3) capacity to use the background information and facts to formulate a coherent set of scientific objectives to investigate. The committee’s ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent, 2 = Marginal, 1 = Unacceptable). The minimum successful score will be “Competent” or better from a majority of the Committee, with no score being “Unacceptable”.	
Measures/Levels of Expectation	100% of all Master of Science students must satisfactorily demonstrate their ability to provide appropriate scientific background information, knowledge of relevant scientific facts, and the ability to formulate a coherent set of scientific objectives for investigation.	
Assessment Results		
Use of Results for Program Improvement		
<p>Outcome 2 - Thesis</p>		
Outcome	All Marine Science Master of Science Students will write a Thesis that presents defensible conclusions drawn from verifiable evidence, and represents an original contribution to the field.	
Methods of Assessment	The College uses an iterative process to assess this outcome. The first step involves a review by the advisor of drafts of the Thesis (1) to determine if the scientific background presented clearly relates to the Thesis topic and supports further research, (2) to assess whether the references and literature used to support the research is appropriate and comprehensive, along with the overall structure of the text and of the citations, and (3) to ensure that the conclusions of the research are justified, convincing and based upon sound scientific principles. The second step requires the student to revise the Thesis based upon the feedback on these components. Following these revisions, the additional committee members evaluate the Thesis based on the same criteria. The committee’s ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent, 2 = Marginal, 1 = Unacceptable). The minimum successful score will be “Competent” or better from a majority of the Committee, with no score being “Unacceptable”.	

Measures/Levels of Expectation	100% of all Master of Science students must demonstrate in their Thesis, defensible conclusions from verifiable evidence as determined by a faculty committee of at least three professors or outside members of equivalent rank.
Assessment Results	
Use of Results for Program Improvement	
Outcome 3 – Thesis Defense	
Outcome	All Marine Science Master of Science students will present a public defense of their Master’s Thesis that demonstrates a thorough knowledge and mastery of the research topic, conclusions drawn from verifiable evidence from their research, and respond satisfactorily to questions arising at the defense.
Methods of Assessment	Each student has a committee of at least three faculty members (or outside members of equivalent rank) that will use a scoring rubric to assess the quality of the oral defense of the student’s research. This evaluation will include assessment of the oral presentation, use of visual components, and response to questions from the public audience and committee members. The committee’s ranking will be based upon a five point scale (5 = Exemplary, 4 = Strong, 3 = Competent, 2 = Marginal, 1 = Unacceptable). The minimum successful score will be “Competent” or better from a majority of the Committee, with no score being “Unacceptable”.
Measures/Levels of Expectation	100% of all Master of Science students must demonstrate a mastery of their research topic and conclusions as determined by their faculty committee.
Assessment Results	
Use of Results for Program Improvement	