

Oceanography Graduate Program Student Learning Outcomes

Upon completion of the <u>Masters</u> program in Oceanography, students will be able to:	
<i>Student Learning Outcome</i>	<i>Evaluation Criteria</i>
Define, explain and summarize the basic principles of Oceanography, including the basic tenets of the sub-disciplines, and to explain complex phenomena in their own subdiscipline	Performance in core courses and in courses specific to each student's subdiscipline
Evaluate the hypotheses, methods, results and conclusions of published scientific literature and apply conclusions to their own work	Synthesis of a written thesis prospectus which utilizes the peer reviewed literature to place their work into the context of the field
Present and defend their scientific findings in front of public audiences	Performance and response to audience questions during public presentations (e.g., second-year talks, conference venues, etc.) and the thesis defense
Write a scientific thesis which contributes to the field	The quality of critical data analysis, interpretation, and presentation in the student's written thesis
Upon completion of the <u>Doctoral</u> program in Oceanography, students will be able to:	
<i>Student Learning Outcome</i>	<i>Evaluation Criteria</i>
Perform all of the above	As above
Comprehensively synthesize, evaluate, and interpret the fundamental knowledge in their subdiscipline and how it relates to the other subdisciplines	Performance on the Comprehensive Exam
Independently construct scientific hypotheses and design and carry out research to evaluate them	Synthesis of a written dissertation proposal which delineates the student's hypotheses and a research plan to critically test and evaluate them; ability to explain and discuss the proposal to the student's committee in the context of the subdiscipline during the Comprehensive exam
Critically analyze and synthesize the results of their research to derive conclusions which advance the field and are of a quality suitable for publication in the peer-reviewed literature	Examination of the student's written dissertation by their committee

**CURRICULUM MAP
FOR OCEANOGRAPHY GRADUATE PROGRAM**

MS OCEANOGRAPHY					
MS Requirements	SLO 1 Broad Knowledge	SLO 2 Research	SLO 3 Scientific Presentation Skills	SLO 4 Scientific Writing Skills	
Course Requirements	I		R	I	
Written thesis prospectus	R	R		R	
Defense	M	M	M		
Thesis	M	M		M	
PhD OCEANOGRAPHY					
PhD Requirements	SLO 1 MS SLO'S 1-4	SLO 2 Comprehensive Knowledge	SLO 3 Independent Research	SLO 4 Scientific Presentation Skills	SLO 5 Scientific Writing Skills
Perform all MS SLO's	M				
Comprehensive Exam		R	R	R	
Written dissertation proposal		M	M		M
Defense		M	M	M	
Dissertation		M	M		M
Abbreviations					
I - SLO is introduced					
R - SLO is reinforced					
M - SLO is mastered					