DEPARTMENT OF BIOLOGY

UNDERGRADUATE PROGRAM CURRICULUM MAP

BS MARINE BIOLOGY

SEPTEMBER 2011

DEFINITIONS OF TERMS

I = Introduce = The level of learning expected of a novice

R = Reinforce = The level of instruction and learning expected with students who have been introduced to concepts or skills previously; not the final goal state

M = Mastery = The intended goal state of learning our program aspires to achieve

X = Not applicable

	Student Learning Outcomes	Common Prequisites				Major Courses																											
						Marine Biology Core						Marine Biology Subcore																					
															Choose at least 10 SH with advisor; The selected courses may not be used to fulfill other program requirements; Maximum of 2 SH of Directed Independent Study																			
		ZOO1010/L General Zoology/Lab	BOT2010/L General Botany/Lab	PCB2131 Cell Biology	PCB2131L Cell Biology Lab	BCH3033/L Biochemistry I/Lab	MCB3020/L Microbiology/L	PCB3063/L Genetics/Lab	PCB4043/L Ecology/Lab	PCB4524/L Molecular Biology/Lab	PCB4723/L Comparative Animal Physiol I/Lab	ZOO4254/L Marine Invertebrate Zoology/Lab	ZOO4304/L Marine Vertebrate Zoology/Lab	BOT4404/L Aquatic Botany/Lab	BSC3905 Directed Independent Study	BSC4263/L Biological Oceanography/Lab	BSC4305 Biogeography	BSC4905 Directed Independent Study	MCB3905 Directed Independent Study	MCB4733 Marine Microbiology	MCB4905 Directed Independent Study	PCB3253/L Developmental Biology/Lab	PCB3905 Directed Independent Study	PCB4048/L Estuarine Ecology/Lab	PCB4364/L Marine Ecological Physiology/Lab	PCB4905 Directed Independent Study	ZOO3905 Directed Independent Study	ZOO4454 Elasmobranch Biology	ZOO4457 Fish Physiology	ZOO4485 Marine Mammalogy	ZOO4513 Animal Behavior	ZOO4880C Fisheries Biology	ZOO4905 Directed Independent Study
Content	Identify and use the concepts, principles, and theories that constitute the core subdisciplines of the biological sciences	I	I	I	I	I	R	I	I	R	M	R	M	R	R	I	R	M	R		M	M	R	I	I	M	R	I	I	I	R	I	M
Content	Employ techniques central to analysis of biological materials	I	I	I	I	I	M	I	R	R	R	R	M	M	R	I	R	M	R		M	M	R	I	I	M	R	I	I	I	R	I	M
Content	Describe discipline-related career paths for which recipients of the BS in Biology are qualified	I	I	I	I	I	R	I	M	R	M	M	X	I	R	I	M	M	R		M	M	R	I	M	M	R	I	I	I	M	X	M
Critical Thinking	Apply scientific method to solve problems in the biological sciences	I	I	I	I	R	R	I	I	R	X	R	M	M	R	R	R	M	R		M	M	R	R	R	M	R	R	R	R	M	M	M
Critical Thinking	Select and conduct appropriate statistical analyses	X	I	I	I	X	I	I	I	X	R	X	I	R	R	R	X	M	R		M	M	R	R	M	M	R	R	R	R	R	M	M
Communication	Employ biological terminology accurately	I	I	I	I	R	R	I	M	R	X	M	X	M	R	R	M	M	R		M	M	R	R	X	M	R	X	X	X	M	X	M
Communication	Use language in written form effectively and professionally	I	I	I	I	R	R	I	M	R	R	R	X	R	R	R	R	M	R		M	M	R	R	R	M	R	X	X	X	R	I	M
Communication	Communicate biological information in oral form employing appropriate technology	I	I	I	I	X	R	I	M	X	X	R	X	R	R	R	R	M	R		M	M	R	R	X	M	R	X	X	X	R	X	M
Integrity/ Values	Describe ethical challenges involved in conducting scientific research with humans and animals	I	X	I	I	R	I	R	I	R	X	R	X	R	R	R	R	M	R		M	M	R	R	I	M	R	I	I	I	M	I	M
Integrity/ Values	Adhere to appropriate ethical practices in research and teaching	I	I	I	I	R	M	R	I	R	I	R	X	M	R	R	R	M	R		M	M	R	R	I	M	R	I	I	I	M	I	M
Project Management	Design and execute a project that incorporates a reasonable time line to address a problem in the biological sciences	I	I	I	I	R	M	R	M	R	X	X	X	R	R	R	X	M	R		M	M	R	R	X	M	R	X	X	X	R	X	M
Project Management	Draw and defend conclusions related to the results of the study	I	I	I	I	R	M	R	M	R	X	X	X	M	R	R	X	M	R		M	M	R	R	M	M	R	X	X	X	R	I	M
Project Management	Collaborate effectively with others on team projects	I	I	I	I	R	M	R	M	R	M	X	X	M	R	R	X	M	R		M	M	R	R	X	M	R	X	X	X	R	X	M