

Course of Study: MS in Biology with Concentration in Ecology and Evolution

I. Required Courses (13-15 credits)

	<u>Credits</u>	<u>Total</u>
BIOL570 Ecology	3	
BIOL580 Evolutionary Mechanisms	3	
BIOL592 Graduate Colloquium	1	
 <u>Physiological Ecology (choose one of the following)</u>		
BIOL571 Physiological Plant Ecology	4 (or)	
BIOL579 Physiological Ecology of Animals	3	
 <u>Ecosystem Ecology (choose one of the following)</u>		
BIOL572 Wetland Ecology	4 (or)	
BIOL573 Shoreline Ecology	4 (or)	
AQUA551 Advanced Aquatic Biological Processes	3	
		13-15

II. Electives (10-14 credits from the following, no more than 6 from 400 level)

BIOL426 New Jersey Flora	4
BIOL430 Ornithology	4
BIOL436 Phylogenetic Zoology	3
BIOL460 Biological Oceanography	4
BIOL521 Field Studies of Flowering Plants	4
BIOL532 Advanced Entomology	3
BIOL553 Microbial Ecology	4
BIOL547 Molecular Biology I	3
BIOL548 Molecular Biology II	4
BIMS564 Benthic Ecology	3
BIMS566 Ecology of the Estuary	3
BIOL574 Behavioral Ecology	3
BIOL576 Biology of Extreme Habitats	3
BIOL586 Selected Advanced Topics in Biology	3-4
BIOL595 Conservation Biology: The Preservation of Biological Diversity	3
GEOS450 Principles of Soil Science	3
GEOS470 Geographic Information Systems (G.I.S.)	3
GEOS530 Paleoecology	3
ENVR551 Natural Resource Management	3
STAT401 Applied Stats for the Sciences	3
STAT440 Fundamentals of Modern Statistics	3
STAT541 Applied Statistics for the Sciences	3
STAT546 Non-Parametric Statistics	3
STAT547 Design and Analysis of Experiments	3
STAT548 Applied Regression Analysis	3
BIMS431 Marine Invertebrate Zoology	4
BIMS450 Marine Botany	4

BIMS455 Marsh and Dune Vegetation	2
BIMS460 Advanced Marine Biology	4
BIMS490 Field Methods in Marine Science	4

10-14

III. Comprehensive Exam/Thesis (5 or 7 credits)

Thesis Option:

BIOL597 Research in Biological Literature	1 credit	
BIOL698 Master's Thesis	6 credits	TOTAL: 7 credits

Non-Thesis Option:

BIOL597 Research in Biological Literature	1 credit	
BIOL599 Introduction to Biological Research	4 credits	
Comprehensive exam	0 credits	TOTAL: 5 credits

Total required credits **32**