

WILDLIFE ECOLOGY & MANAGEMENT – CORE Program

Revised: 1.31.17 – ABM - EFFECTIVE Fall 2016 for all CORE students declaring Wildlife Ecology and Management in Fall 2016 or later.

UM Core: ENGL 101 _____, (HL) _____, (HA) _____, (HL/HA/HO/IE) _____, (SH) _____, Diversity _____
 Adv. Writing _____, Adv. Studies _____, (SB) _____, (SB/IE) _____.

Grading Policy: Environmental Science and Policy students must earn C- grades or higher in all ENSP core courses and in all required courses and restricted electives of the selected area of concentration.

Required from ENSP Core:

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
All three:							
ENSP 101 (PS)	Intro. to Environmental Science	3	F	-	___	_____	_____
ENSP 102	Intro. to Environmental Policy	3	Sp	-	___	_____	_____
ENSP 400 (AS)	Capstone in Env. Sci & Policy	3	Sp, F	Senior year; ENSP 101 and 102	___	_____	_____
Calculus:							
MATH 140 (MS) <i>or</i> MATH 220 (MS)	Calculus I (recommended) Elementary Calculus I	4 3	Sp, F, Su Sp, F, Su	MATH 115 w/C or better MATH 113 or 115	___ ___	_____ _____	_____ _____
Statistics (one):							
BIOM 301	Introduction to Biometrics	3	Sp, F	MATH 115	___	_____	_____
GEOG306	Intro to Quant Methods in Geog <i>(strongly recommended)</i>	3	Sp, Su		___	_____	_____
Biology:							
BSCI 160/161 (LL)	Principles of Ecol and Evolution	3/1	Sp, F, Su	placement in MATH 220 or higher			
Chemistry:							
CHEM 131/132 (PL)	General Chemistry I	3/1	Sp, F, Su	placement in MATH 220 or higher			
Earth Sciences:							
ENST 200 (LL)	Intro to Soil Science	4	Fa	CHEM 131/132.			

And: One (1) course from (1) of the white boxes; and one (1) Applied Science and Policy course from the yellow box.

Economics (one):							
AREC 240 (SB)	Intro. to Economics and the Envir.	4	Sp	MATH 220 or higher recommended	___	_____	_____
AREC 241	Environment, Econ., and Policy	4	Fa	MATH 220 or higher recommended	___	_____	_____
ECON 200 (SB)	Principles of Micro-Economics	4	Sp, F, Su	MATH 110 or higher			
Geography (one):							
GEOG 100 (SB)	Intro to Geography	3	F	-	___	_____	_____
GEOG 130 (SB/D)	Developing Countries	3	Fa, Su	-	___	_____	_____
GEOG 140 (PS)	Natural Disasters	3	F	-	___	_____	_____
GEOG 202 (SB)	Intro to Human Geography	3	Sp	-	___	_____	_____
Applied Sci & Policy (req'd)							
ENSP305	Quant. Meth. In ENSP	3	S	Calc, Stats, and dept. perm.	___	_____	_____
ENSP 330	Introduction to Environmental Law	3	F, S	Permission of dept; Junior standing.	___	_____	_____
ENSP 340	Water: Science, Ethics, and Law	3	F	Permission of dept; Junior standing.	___	_____	_____
ENSP 342	Oceans: Integrated Policy	3	S	GVPT 170 or ENSP 102	___	_____	_____

REQUIRED for WILDLIFE ECOLOGY & MANAGEMENT

FUNDAMENTALS & BACKGROUND – 25-26 credits

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
BSCI170/171	Principles of Molecular and Cellular	3/1	F,Sp,Su	Math 220 placement			
BSCI 222	Principles of Genetics	4	F,Sp,Su	BSCI 170/171, 1 year college chemistry			
ENST214	Intro to Fisheries and Wildlife Sci	3	F	BSCI 160/161			
CHEM 231/232	Organic Chemistry I (with lab)	3/1	F, Sp	CHEM 131/132			
PHYS 121	Fundamentals of Physics I	4	F,Sp,Su	MATH 220 recommended.			
BSCI 361	Principles of Ecology	4	F, Sp	BSCI 160/161 and MATH 220			
ENST 460	Principles of Wildlife Management	3	Fa				

INTERNSHIP/RESEARCH – 3-6 credits

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
ENSP 386 <i>or</i> ENSP 499	Internship <i>or</i> Honors Thesis Research	3	F,Sp,Su F,Sp,Su	Permission of advisor and ENSP Director Permission of advisor			

RESTRICTED ELECTIVES – 21-22 credits, including at least 3 courses and 9 credits each from Area I and Area II. Add your credits carefully to be sure they add up. See note on Area II (over).

Area I – Ecological and Taxonomic Sciences

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
BSCI 334	Mammalogy	3	Sp	BSCI 160/161. <i>Strongly rec. for student interested in grad school or certification as a Wildlife Biologist.</i>			
BSCI 335	Mammalogy Lab	1	Sp				
BSCI 337	Biology of Insects	4	Sp	BSCI 160/161			
BSCI 363	Biology of Conserv and Extinction	3	Sp	BSCI 160/161			
BSCI 338Q	Conservation Lab	1	Sp	Co-req. BSCI 363			
BSCI 370	Evolution	3	F	BSCI 160/161			
BSCI 390	Vertebrate Zoology	3	Su	BSCI 160/161 and BSCI 207 or perm.			
BSCI 391	Vertebrate Zoology Laboratory	1	Su	Co-req. BSCI 391			
BSCI 394	Vertebrate Form and Function	3	Su				
BSCI 460	Plant Ecology	3	TBA	BSCI 160/161			
BSCI 462	Population Ecology	3	Sp	BSCI 160/161 and MATH 220			
BSCI 473	Marine Ecology	3	Sp	BSCI 207			
BSCI 494	Animal-Plant Interactions	3	Sp	BSCI 160/161 and BSCI 207			
ENST 450	Wetland Ecology	3	F	BIOM 301.			
GEOL 331	Principles of Paleontology	4	F	GEOL 102 or perm.			
PLSC 253	Woody Plant Material I	3	F	PLSC 100. <i>Strongly rec. for student interested in certification as a Wildlife Biologist.</i>			
PLSC 254	Woody Plant Material II	3	Sp	PLSC 100 or BSCI 226			
PLSC 400 <i>or</i> BSCI 442	Environmental Plant Physiology <i>or</i> Plant Physiology	3 3	Sp Sp	BSCI 160/161 or 170/171 <i>and</i> CHEM231/232 BSCI 160/161 or 170/171 <i>and</i> CHEM231/232			
PLSC 471	Forest Ecology	3	Sp	BSCI 160/161 or PLSC 201			

- **Approved substitutions:**

Area II – Management

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
ANSC 252	Intro to the Diseases of Wildlife	3	F	BSCI 170/171 or perm.			
ANSC 453	Animal Welfare	3	Sp	BSCI 160/161 or ANSC 101			
GEOG 331	Intro to Human Dimens of Global Chg	3	F				
GEOG 373	Geographic Information Systems	3	F,W,Sp,Su				
GEOG 431	Culture and Natural Resource Mgmt	3	F				
GEOG 441	The Coastal Ocean	3	Sp	GEOG 201/211			
GEOL 437	Global Climate Change: Past and Pres.	3	Sp	MATH 115 or 140; GEOL 100 or 120; and CHEM 131/132			
ENST 314	Fisheries Mgmt and Sustainability	3	Sp*	One year of biological sciences; <i>*Offered Spring of "even" years (2014, 2016...)</i>			
ENST 415	Soil Survey and Land Use	4	F	ENST 200			
ENST 461	Urban Wildlife Management	3	F				
ENST 462	Field Techniques in Wildlife Mgt	3	Sp	ENST460 or permission of instructor.			
ENST 479	Tropical Ecol and Resource Mgt	3	Sp	BSCI 160/161. <i>Course has a required travel-study component. Contact dept of ENST for details.</i>			
PLSC 474	Silviculture	4	F	BSCI 160/161 or PLSC 100			

- **Approved substitutions:**