

WILDLIFE ECOLOGY & MANAGEMENT – CORE Program

As of: 1.31.17

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) ENSP 102 ENSP 400 (AS)	Intro. to Environmental Science Intro. to Environmental Policy Capstone in Env. Sci & Policy	3 3 3	F Sp 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 GEOG306	Introduction to Biometrics Intro to Quant Methods in Geog <i>(strongly recommended)</i>	3 3	Sp, F Sp, Su	MATH 115	_____ _____	_____ _____	_____ _____
Biology: BSCI 106 (LL)	Principles of Biology II	4	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 2 of the next 3 categories:

Economics (one): AREC 240 (SB) AREC 241 ECON 200 (SB)	Intro. to Economics and the Envir. Environment, Econ., and Policy Principles of Micro-Economics	4 4 4	Sp Fa Sp, F, Su	MATH 220 or higher recommended MATH 220 or higher recommended MATH 110 or higher	_____ _____ _____	_____ _____ _____	_____ _____ _____
Geography (one): GEOG 100 (SB) GEOG 130 (SB/D) GEOG 140 (PS) GEOG 202 (SB)	Intro to Geography Developing Countries Natural Disasters Intro to Human Geography	3 3 3 3	F Fa, Su F Sp	- - - -	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
Govt & Politics (one): ENSP 330 ENSP 340 ENSP 342 GVPT 273	Introduction to Environmental Law Water: Science, Ethics, and Law Oceans: Integrated Policy Intro. to Environmental Politics	3 3 3 3	F, S F S Sp	Permission of dept; Junior standing. Permission of dept; Junior standing. Permission of dept; Junior standing. GVPT 170 or ENSP 102	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____

REQUIRED for WILDLIFE ECOLOGY & MANAGEMENT

FUNDAMENTALS & BACKGROUND – 25-26 credits

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
BSCI 105	Principles of Biology	4	F,Sp,Su	Math 220 placement			
BSCI 222	Principles of Genetics	4	F,Sp,Su	BSCI 105, 1 year college chemistry			
BSCI 207	Organismal Biology	3	F, Sp	BSCI 105, BSCI 106, and CHEM 131/132			
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 <i>or</i> GEOG 342	Principles of Ecology Intro to Biogeography	4 3	F, Sp Sp	BSCI 106 and MATH 220 GEOG 201/ 211 recommended			
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 106. <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 106			
BSCI 363	Biology of Conserv and Extinction	3	Sp	BSCI 106			
BSCI 338Q	Conservation Lab	1	Sp	Co-req. BSCI 363			
BSCI 370	Evolution	3	F	BSCI 106			
BSCI 390	Vertebrate Zoology	3	Su	BSCI 106 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	F	BSCI 106			
BSCI 462	Population Ecology	3	Sp	BSCI 106 and MATH 220			
BSCI 473	Marine Ecology	3	Sp	BSCI 207			
BSCI 494	Animal-Plant Interactions	3	Sp	BSCI 106 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	Environmental Plant Physiology	3	Sp				
PLSC 471	Forest Ecology	3	Sp	BSCI 106 or PLSC 201			

- **Approved substitutions:**

Area II – Management – GEOG 373 (3 cr) and ENST 462 (2 cr) are strongly recommended; however, if you take ENST 462, you will need four courses (total) to complete the 9-credit minimum in this area.

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
ANSC 252	Intro to the Diseases of Wildlife	3	F	BSCI 105 or perm.			
ANSC 453	Animal Welfare	3	Sp	BSCI 106 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			
GEO <u>L</u> 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 106. <i>Course has a required travel-study component. Contact dept of ENST for details.</i>			
PLSC 474	Silviculture	4	F	BSCI 106 or PLSC 100			

- **Approved substitutions:**