

ENSP – Wildlife Ecology and Management

Effective -- Fall 2016

Revised 1.31.17 – ABM

ENSP Core				General Education		
All				Fundamental Studies (15 credits)		
Course	Title	Offered	Grade	Requirements	Course	Cr
ENSP101 (NS) ENSP102 (HS) ENSP400 (SP)	Intro to Env Science Intro to Env Policy Senior Capstone	Fa Sp Fa,Sp		Academic Writing (AW)		3
Applied Science and Policy (one)				Distributive Studies (25 credits)		
ENSP305 ENSP330 ENSP340 ENSP342 ENSP350	Quant. Methods Environmental Law Sci, Ethics, Law: Water Oceans: Integ. Policy Energy & Science	Sp Fa, Sp Fa Sp TBA		Requirements		
Calculus (one)				Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
MATH120 (MA) MATH140 (MA)	Elementary Calculus Calculus I (<i>recommended</i>)	Fa,Sp,Su Fa,Sp,Su	Grade	Natural Science (NS)	ENSP 101	3
Statistics (one)				History and/or Social Sci (HS1)	ENSP 102	3
BIOM301 (AR) GEOG306 (AR) <i>** recommended</i>	Intro to Biometrics Intro to Quant Methods	Fa,W,Sp Fa,Sp,Su, W	Grade	History and/or Social Sci (HS2)		4
One course from 4 of the 5 groups below:				Humanities (HU1)		3
Biology (req'd)				Humanities (HU2)		3
BSCI160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade	Scholarship in Practice (SP, major)	ENSP 400	3
Chemistry (req'd)				Scholarship in Practice (SP, non-major)		3
CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade	I-Series (6 credits)*		
Earth Sci (req'd)				* May double-count with Distributive Studies		
ENST200 (NL)	Fund of Soil Science	Fa	Grade	Requirements	Course	Cr
Economics (one)				I- Series (IS)		3
AREC240 (HS) AREC241 (HS, IS) ECON200 (HS)	Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics	Sp Fa Fa,Sp,W		I- Series (IS)		3
Geography (one)				Diversity (4-6 credits)*		
GEOG130 (HS) GEOG140 (IS) GEOG170 (NS) GEOG202 (CC)	Developing Countries Natural Disasters Meth of Geospatial Anal Intro to Human Geog	Fa,Su Fa, Sp Fa Sp		* May double-count with Distributive Studies		
ENSP Graduation Requirements				Requirements	Course	Cr
_____ Students must earn <u>C-</u> or <u>higher</u> in all courses used for ENSP Core and Concentration requirements. _____ Students' major GPA must be 2.0 or higher.				Understanding Plural Societies (UP)		3-6
				Experiential Learning (0-3 credits)*		
_____ Up to 6 AP courses may be used for Gen Ed _____ There are at least 40 non-overlapping Gen Ed credits _____ No more than 60 credits earned from Community College _____ Last 30 credits must be earned at Maryland _____ 120+ cumulative credits <i>and</i> 2.0+ cum GPA				* May overlap with major requirements		
				Graduation Requirements		
_____ Students must earn <u>C-</u> or <u>higher</u> in all courses used for ENSP Core and Concentration requirements. _____ Students' major GPA must be 2.0 or higher.				Requirements	Course	Cr
				Practical experience is <i>required</i> in this concentration		

ENSP – Wildlife Ecology and Management (cont'd)

REQUIREMENTS (25-26 credits): Note the 4th semester Benchmarks (in red). Wildlife students are strongly encouraged to complete Organic Chem ASAP, even if it means summer school, to ensure smooth academic progress and an on-time graduation.

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 170/171	Cellular and Molecular Biology	4	F,Sp,Su	Math 220 placement	
ENST 214	Intro to Fish and Wildlife Sciences	3	Sp	BSCI 160/161	
BSCI 222	Principles of Genetics	4	F,Sp,Su	BSCI 170/171, 1 year college chemistry	
CHEM 231/232	Organic Chemistry I (with lab)	3/1	F,Sp,Su	CHEM 131/132	
PHYS 121	Fundamentals of Physics I	4	F,Sp,Su	Math 220 recommended	
BSCI 361	Principles of Ecology	4	F, Sp	BSCI160/161 and MATH220	
ENST 460	Principles of Wildlife Management	3	Fa	two semesters of biology laboratory; and BSCI361	

INTERNSHIP/RESEARCH (3-6 credits):

Course	Description	Cr	Offered	Prerequisites	Grade
ENSP 386 <i>or</i> ENSP 499	Internship <i>or</i> Honors Thesis Research	3 6	F,Sp,Su F,Sp,Su	Approved proposal Permission of advisor	

RESTRICTED ELECTIVES (21-22 credits, including at least 3 courses and 9 credits each in Area 1 and Area 2).

Other courses may be approved with advisor approval *in advance*. *Count credits carefully to be sure they add up.*

>>> Area 1 – Ecological and Taxonomic Dimensions

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 207	Organismal Biology	3	F, Sp	BSCI 170/171, BSCI 160/161, and CHEM 131/132	
BSCI 334	Mammalogy	3	Sp	BSCI 160/161. Strongly rec. for students interested in grad school or certification as a Wildlife Biologist.	
BSCI 335	Mammalogy Lab	1	Sp		
BSCI 337	Biology of Insects	4	Sp	BSCI 160/161	
BSCI 363	Biology of Conserv and Extinction	3	F	BSCI 160/161	
BSCI 338Q	Conservation Lab	1	Sp	Co-req. BSCI 363	
BSCI360	Principles of Animal Behavior	3	F, Sp	BSCI105, 106, and 222.	
BSCI 370	Evolution	3	Sp, F	BSCI 160/161	
BSCI392	Biology of Extinct Animals	3	F	BSCI 160/161	
BSCI 394	Vertebrate Form and Function	3	Su		
BSCI 442	Plant Physiology	4	Sp	BSCI105 or 106; and CHEM231/232	
PLSC 400	Environmental Plant Physiology	4	Sp	BSCI105 or 106; and CHEM231/232	
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	
BSCI481	Insect diversity and classification	4	F	BSCI337	
BSCI 494	Animal-Plant Interactions	3	Sp	BSCI 160/161 and BSCI 207	
ENST 450	Wetland Ecology	3	F	BIOM301. Offered in "even" years: 2016, 2018	
GEOL 331	Principles of Paleontology	4	F	GEOL102 or perm.	
PLSC 253	Woody Plant Material I	3	F	PLSC100 or perm. Strongly rec. for students interested in certification as a Wildlife Biologist.	
PLSC 254	Woody Plant Material II	3	Sp	PLSC 100 or BSCI 226	
PLSC 471	Forest Ecology	3	Sp	BSCI 160/161 or PLSC 201	

>>> Area 2 – Management.

Course	Description	Cr	Offered	Prerequisites	Grade
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	
ENSP 305	Applied Quant. Analysis	3	Sp	ENSP101 and 102; MATH220 or higher; and Stats.	
ENST333	Ecosystem Health and Protection	3	F	ENST233 and dept. perm.	
GEOG 373	Geographic Information Systems	3	F,W,Sp,Su		
ENST 314	Fisheries Mgmt and Sustainability	3	Sp*	ENST214. Offered Spring of even years (2018, etc)	
ENST 404	Natural Resources & Env Ethics	3	Sp	ENST214. Offered Spring of odd years (2017, etc.)	
ENST 406	Applied Forestry Practices	3	Sp	ENST200 and (BSCI361 or PLSC471)	
ENST 461	Urban Wildlife Management	3	F		
ENST 462	Field Techniques in Wildlife Mgt	3	Sp	ENST460.	
ENST 479	Tropical Ecol and Resource Mgt	3	Sp	BSCI 160/161. Course has required travel-study.	
ENST489D	Ecol and Mgmt of Wildlife Habitats	3	Sp	GEOG373	
ENST465	Ecol and Mgmt of Wild Hab (Lab)	1	Sp	Co-req: ENST489D	