# **ENSP – Wildlife Ecology and Management**

#### **Effective Fall 2022**

NOTE: always refer to the Schedule of Classes on Testudo for the most up-to-date information regarding course offerings, prerequisites and restrictions.

#### **ENSP Core**

Course	Title	Offered	Grade
All three:			
ENSP101 (NS)	Intro to Env Science	Fa	
ENSP102 (HS)	Intro to Env Policy	Sp	
ENSP400 (SP)	Senior Capstone	Fa,Sp	
Applied Science &			
Policy (pick one)			
ENSP306	Qual. Research/Env.Sci	Sp	
ENSP330	Environmental Law	Fa, Sp	
ENSP340	Sci, Ethics, Law: Water	Fa	
ENSP342	Oceans: Integ. Policy	Sp	
ENSP350	Energy & Science	TBA	
ENSP370	Environmental Justice	Sp	
Calculus (pick one)			Grade
MATH120 (MA) or	Elementary Calculus	Fa,Sp,Su	
MATH140 (MA)	Calculus I (recommended)	Fa,Sp,Su	
Statistics (pick one)			Grade
BIOM301 (AR) <i>or</i>	Intro to Biometrics	Fa,W,Sp	
GEOG306 (AR)	Intro to Quant Methods	Sp,Su,W	
GEOGSOO (FIII)	intro to Quant Methods		

#### One course from 4 of the 5 groups below:

Ecology & Evolution/Lab		Grade
Ecology of Evolution Eac	Fa,Sp,Su	
Gen Chemistry I/Lab	Fa,Sp,Su	Grade
Fund of Soil Science	Fa, Sp	Grade
Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics	Sp Fa Fa.Sp.W	
Development Geography	Fa,Su	
Natural Disasters Meth of Geospatial Anal Intro to Human Geog	Fa, Sp Fa Sp	
	Fund of Soil Science  Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics  Development Geography Natural Disasters	Fund of Soil Science  Fa, Sp  Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics  Development Geography Natural Disasters Meth of Geospatial Anal  Fa, Sp Fa

#### **ENSP Graduation Requirements**

Students must earn C- or higher in all courses used for ENSP Core and Concentration requirements.

\_\_ Students' major GPÂ must be 2.0 or higher.

# **General Education**

#### **Fundamental Studies (15 credits)**

Requirements	Course	Cr
Academic Writing (AW)		3
Professional Writing (PW)		3
Oral Communication (OC)		3
Math (MA)	Calculus	3-4
Analytical Reasoning (AR)	Statistics	

#### **Distributive Studies (25 credits)**

Requirements	Course	Cr
Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
Natural Science (NS)	ENSP 101	3
History and/or Social Sci (HS1)	ENSP 102	3
History and/or Social Sci (HS2)		4
Humanities (HU1)		3
Humanities (HU2)		3
Scholarship in Practice (SP, major)	ENSP 400	3
Scholarship in Practice (SP, non-major)		3

#### I-Series (6 credits)\*

\* May double-count with Distributive Studies

Requirements	Course	Cr
I- Series (IS)		3
I- Series (IS)		3

### Diversity (4-6 credits)\*

\* May double-count with Distributive Studies

Requirements	Course	Cr
Understanding Plural Societies (UP)		3-6
Understanding Plural Societies (UP)		
or Cultural Competency (CC)		0-3

## Experiential Learning (0-3 credits)\*

\* May overlap with major requirements

Requirements	Course	Cr
Practical experience is <i>required</i> in this		
concentration		

#### **Graduation Requirements**

	Up to 6 AP courses may be used for Gen Ed
	No more than 60 credits earned from Community
Colles	re

Last 30 credits must be earned at Maryland
120+ cumulative gradity and 2.0+ cum GD

# **ENSP** – Wildlife Ecology and Management (cont'd)

**REQUIREMENTS (8 courses, 29 credits):** Note the 4<sup>th</sup> 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	MATH120 placement	
ENST 214	Intro to Fish and Wildlife Sciences	3	Sp	BSCI 160/161	
BSCI 222	Principles of Genetics	4	F,Sp,Su	BSCI161/161BSCI 170/171, CHEM131/132	
CHEM 231/232	Organic Chemistry I (with lab)	4	F,Sp,Su	CHEM 131/132	
PHYS 121	Fundamentals of Physics I	4	F,Sp,Su	MATH120 recommended	
BSCI 361	Principles of Ecology	4	F, Sp	BSCI160/161 and MATH120	
ENST 460	Principles of Wildlife Management	3	Fa	two semesters of BSCI labs; and BSCI361	
ENSP305	Applied Spatial Methods	3	Fa	ENSP101, ENSP102, GEOG373 or perm.; Jr standing	

# INTERNSHIP/RESEARCH (3-6 credits):

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

**RESTRICTED ELECTIVES** (6 courses, 18 credits). At least 3 courses and 9 credits in each area below. 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 - choose 3 courses

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 207	Organismal Biology	3	F, Sp	BSCI 170/171, BSCI 160/161, & CHEM 131/132	
BSCI 334	Mammalogy	3	Sp	BSCI 160/161, BSCI207.	
BSCI 335	Mammalogy Lab	1	Sp	BSCI 160/161, BSCI207	
BSCI 337	Biology of Insects	4	Sp	BSCI 160/161	
BSCI 363	Biology of Conserv and Extinction	3	F	BSCI361	
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		
BSCI400	Animal Diversity and Evolution	3	Sp	C-or better in BSCI160 and BSCI207	
BSCI401	Animal Communication	3	Sp	BSCI160/161; one sem.of physics & organic chem	
BSCI 442	Plant Physiology	4	Sp	BSCI105 or 106; & CHEM231/232 or dept perm.	
PLSC 400	Environmental Plant Physiology	4	Sp	BSCI105 or 106; & CHEM231/232 or dept. perm.	
BSCI 460	Plant Ecology	3	TBA	BSCI 160/161	
BSCI 462	Population Ecology	3	Sp	BSCI 160/161 and MATH120	
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	
ENST452	Wetland Restoration	3	Sp	BSCI160/161 & (BSCI362, ENST450, ENST360, or BSCI361).	
GEOL 331	Principles of Paleontology	4	F	GEOL102 or perm.	
PLSC 253	Woody Plant Material I	3	F	PLSC100 or perm.	
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 - choose 3 courses

Course	Description	Cr	Offered	Prerequisites	Grade
ANSC 252	Intro to the Diseases of Wildlife	3	F	BSCI 170/171 or perm.	
ANSC440	Zoonotic Diseases and Control	3	Sp	BSCI223, ANSC212, ANSC327, BSCI222, BSCI421, or NFSC430; or perm	
ANSC 453	Animal Welfare	3	Sp	BSCI 160/161 or ANSC 101	
ENST333	Ecosystem Health and Protection	3	F	ENST233 and dept. perm.	
GEOG 373	Geographic Information Systems	3	F,W,Sp,Su		
GEOG442	Biogeography and Enviro Change	3	F	GEGO301,GEOG102/211; or perm of GEOG dept	
ENST 314	Fisheries Mgmt and Sustainability	3	TBD		
ENST403	Invasive Species Ecology	3	F		
ENST 404	Natural Resources & Env Ethics	3	Sp	ENST214. Offered Spring of odd years (2017, etc.)	
ENST 406	Applied Forestry Practices	3	TBD	ENST200 and (BSCI361 or PLSC471)	
ENST 461	Urban Wildlife Management	3	F		
ENST 462	Field Techniques in Wildlife Mgt	3	Sp	ENST460.	
ENST487	Enviro Conflicts & Decision Making	2	F		