

# ENSP – Biodiversity & Conservation Biology

Updated 4.19.19 - ABM

Effective Fall 2010, all students must meet LEP requirements to gain admission to ENSP-Biodiversity. Courses indicated in **RED** must be completed *prior to* applying for admission to this concentration. Additional details here: <http://cmns.umd.edu/cmnsmajorchange>

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

<b>ENSP Core</b>			
Course	Title	Offered	Grade
<b>All three</b>			
ENSP101 (NS)	Intro to Env Science	Fa	
ENSP102 (HS)	Intro to Env Policy	Sp	
ENSP400 (SP)	Senior Capstone	Fa,Sp	
<b>Applied Science &amp; Policy (pick one)</b>			
ENSP305	Applied Quant. Methods in Env. Sci & Policy	Sp	
ENSP330	Environmental Law	Fa, Sp	
ENSP340	Sci, Ethics, Law: Water	Fa	
ENSP342	Oceans: Integ. Policy	Sp	
ENSP350	Energy: Science & Policy	TBA	
<b>Calculus (pick one)</b>			
MATH120 (MA) or MATH140 (MA)	Elementary Calculus Calculus I <i>(recommended)</i>	Fa,Sp,Su Fa,Sp,Su	Grade
<b>Statistics (pick one)</b>			
BIOM301 (AR)	Intro to Biometrics	Fa,W,Sp	Grade
GEOG306 (AR)	Intro to Quant Methods	Sp,Su,W	
PSYC200 (AR)	Stat Methods in Psyc	Fa,Sp,Su	
<b>Four (4) courses from the 5 groups below:</b>			
<b>Biology (req'd)</b>			
BSCH160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade
<b>Chemistry (req'd)</b>			
CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade
<b>Earth Sci (req'd)</b>			
GEOG201/211 (NL)	Geog Environ Sys/Lab	Fa,Sp,Su	Grade
<b>Economics (pick one)</b>			
AREC240 (HS)	Intro to Econ and Env	Sp	
AREC241 (HS, IS)	Env, Econ, and Policy	Fa	
ECON200 (HS)	Princ of Microeconomics	Fa,Sp,W	
<b>Geography (pick one)</b>			
GEOG130 (HS)	Development Geography	Fa,Su	
GEOG140 (IS)	Natural Disasters	Fa, Sp	
GEOG170 (NS)	Meth of Geospatial Anal	Fa	
GEOG202 (CC)	Intro to Human Geog	Sp	
<b>ENSP Graduation Requirements</b>			
_____ Students must earn <u>C-</u> or higher in all courses used for ENSP Core and Concentration requirements.			
_____ Students' major GPA must be 2.0 or higher.			

<b>General Education</b>		
<b>Fundamental Studies (15 credits)</b>		
Requirements	Course	Cr
Academic Writing (AW)		3
Professional Writing (PW)		3
Oral Communication (OC)		3
Math (MA)	Calculus	3-4
Analytical Reasoning (AR)	Statistics	
<b>Distributive Studies (25 credits)</b>		
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
<b>I-Series (6 credits)*</b>		
* May double-count with Distributive Studies		
Requirements	Course	Cr
I- Series (IS)		3
I- Series (IS)		3
<b>Diversity (4-6 credits)*</b>		
* 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
<b>Experiential Learning (0-3 credits)*</b>		
* May overlap with major requirements		
Requirements	Course	Cr
Practical experience is <i>recommended</i> in this concentration		
<b>Graduation Requirements</b>		
_____ Up to 6 AP courses <b>may</b> be used for Gen Ed		
_____ 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		

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**REQUIREMENTS (9 courses, 32-33 cr):** Students may use BSCI160/161 or BSCI170/171 for LEP admission purposes. For updated LEP requirements, go to: <http://www.lep.umd.edu/cmns-lep.pdf>

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 170/171	Molecular and Cellular Biol/Lab	4	Sp, F, Su	Placement in MATH 120 or higher.	
BSCI 207	Organismal Biology	3	Sp, F	BSCI160/161, BSCI170/171, CHEM131/132	
BSCI 222	Principles of Genetics	4	Sp, F, Su	BSCI160/161, BSCI 170/171, 1 year college chemistry	
BSCI 361	Principles of Ecology	4	Sp, F	BSCI160/161 and Calculus	
BSCI 363	Biology of Cons and Extinction	3	F	BSCI361	
BSCI 370	Principles of Evolution	3	Sp, F	BSCI 160/161	
CHEM 231/232	Organic Chemistry I / Lab	3/1	Sp, F, Su	CHEM 131/132	
CHEM 241/242	Organic Chemistry II / Lab	3/1	Sp, F, Su	CHEM 231/232	
<b>Select one:</b> MATH 141 MATH 121	Calculus II Elementary Calculus II	4 3	Sp, F, Su Sp, F, Su	MATH 140 or equivalent MATH 120, 130, or 140, or equivalent	___ ___

### RESTRICTED ELECTIVES (5 courses, 15 credits) Must include at least one laboratory (L) course):

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 334/335	Mammalogy	3/1 (L)	Sp	BSCI 160/161 & BSCI207	
BSCI 337	Biology of Insects	4 (L)	F	BSCI 160/161	
BSCI 338	Special Topics in Biology	1-4	Varies	Varies – Must be approved by advisor	
BSCI 338Q	Spec. Top. Conservation Lab	1 (L)	Sp	To be taken concurrently w/BSCI 363.	
BSCI 360	Principles of Animal Behavior	3	F, Su	BSCI 160/161, 170/171, and 222	
BSCI 392	Biology of Extinct Animals	3	F	BSCI 160/161 and BSCI 207	
BSCI 393	Biology of Extinct Animals Lab.	1 (L)	F	Pre- or co-requisite: BSCI 392	
BSCI 460	Plant Ecology	3	TBA	BSCI 160/161	
BSCI 461	Plant Ecology Laboratory	2 (L)	F	Pre- or corequisite: BSCI 460	
BSCI 462	Population Ecology	3	S	BSCI 160/161 and Calculus	
BSCI 465	Behavioral Ecology	3	Varies		
BSCI 467	Freshwater Biology	4 (L)	F	Prereq: BSCI 207 or dept. perm.	
BSCI 473	Marine Ecology	3	Sp	BSCI 207.	
BSCI 480	Arthropod Form and Function	4 (L)	Sp	Permission from BSCI office.	
BSCI 481	Insect Diversity and Classification	4 (L)	F	BSCI 207 or dept. perm.	
ENSP 386	Internship	3	Sp,Su,Fa	ENSP386 Intern. prop. (approved in adv.)	
ENST 314	Fisheries Mgmt and Sustainability	3	Sp	Prereq: one year of biology. Offered in Spring of "even" years (2016, 2018, etc.)	
ENST 373	Natural Hist of the Ches. Bay	3	Fa	a course in biology or dept. perm.	
ENST 450	Wetland Ecology	3 (L)	F	BIOM 301. Offered "even" years, e.g., Fall 2016, 2018, etc.	
ENST 460	Principles of Wildlife Management	3	Fa	BSCI361; 2 semesters of lab. Biology	
ENST 461	Urban Wildlife Management	3	F	-	
ENST 479	Tropical Ecol and Resource Mgmt	3	Sp	BSCI 160/161 and perm. Course has required travel-study component.	
GEOG 373	Geographic Information Systems	3	F,W,Sp,Su		
GEOG 418	Field & Lab Tech in Env Science	3 (L)	F	The field component takes place in summer. Contact instructor for info and perm.	
GEOG 442	Biogeography	3	F	BSCI 361 or GEOG 342 or equivalent	
GEOL 453	Ecosystem Restoration	3	F	Calculus, CHEM131/132, and (GEOL100 or ENST200).	
PLSC 471	Forest Ecology	3	Sp	BSCI 160/161 or PLSC 201	
PLSC 481	Vegetation Assessment	2 (L)	Sp	GEOG306 recommended.	
PLSC 4890	Plant Taxonomy	3 (L)	Sp		

Study abroad and graduate-level courses may be acceptable; please contact your advisor *in advance* for approval.

**Advisor notes and approved course substitutions, etc:**