

ENSP – Biodiversity & Conservation Biology

Updated 7/12/21 - 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.

ENSP Core			
Course	Title	Offered	Grade
All three ENSP101 (NS) ENSP102 (HS) ENSP400 (SP)	Intro to Env Science Intro to Env Policy Senior Capstone	Fa Sp Fa,Sp	
Applied Science and Policy (one) ENSP305 ENSP306 ENSP330 ENSP340 ENSP342 ENSP350 ENSP370	Applied Spatial Methods Qual Research/Env Sci Environmental Law Sci, Ethics, Law: Water Oceans: Integ. Policy Energy: Science & Policy Environmental Justice	Sp Fa Fa, Sp Fa Sp TBA Sp	
Calculus (pick one) MATH120 (MA) MATH136 or MATH140 (MA)	Elementary Calculus Calculus for Life Sci. Calculus I <i>(recommended)</i>	Fa,Sp,Su Fa,Sp,Su Fa,Sp,Su	Grade
Statistics (pick one) BIOM301 (AR) GEOG306 (AR) PSYC200 (AR)	Intro to Biometrics Intro to Quant Methods Stat Methods in Psyc	Fa,W,Sp Sp,Su,W Fa,Sp,Su	Grade

***Math LEP requirement can be fulfilled with MATH120, 140 or 135**

Four (4) courses from the 5 groups below:

Biology (req'd) BSCH160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade
Chemistry (req'd) CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade
Earth Sci (req'd) GEOG201/211 (NL)	Geog Environ Sys/Lab	Fa,Sp,Su	Grade
Economics (pick one) AREC240 (HS) AREC241 (HS, IS) ECON200 (HS)	Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics	Sp Fa Fa,Sp,W	
Geography (pick one) GEOG130 (HS) GEOG140 (IS) GEOG170 (NS) GEOG202 (CC)	Development Geography Natural Disasters Meth of Geospatial Anal Intro to Human Geog	Fa,Su Fa, Sp Fa Sp	

ENSP Graduation Requirements

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

____ Students' major GPA 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>recommended</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 College
- ____ Last 30 credits must be earned at Maryland
- ____ 120+ cumulative credits *and* 2.0+ cum GPA

Biodiversity & Conservation Biology (p.2)

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, Su	BSCI160/161, BSCI170/171, CHEM131/132	
BSCI 222	Principles of Genetics	4	Sp, F, W, Su	BSCI160/161, BSCI170/171, 1 yr college chem	
BSCI 361	Principles of Ecology	4	Sp, W, F, Su	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, BSCI222	
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	
Select one:					
MATH 141	Calculus II	4	Sp, F, Su	MATH 140 or equivalent	—
MATH 121	Elementary Calculus II	3	Sp, F, Su	MATH 120, 130, or 140, or equivalent	—
MATH135	Discrete Math for Life Sciences	4	Sp, F, Su	MATH140 eligibility	—

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 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 405	Population and Evol. Genetics	3 (L)	F	BSCI222; & (MATH131, MATH136 or MATH141)	
BSCI 460	Plant Ecology	3	TBA	BSCI 160/161	
BSCI 462	Population Ecology	3	S	BSCI 160/161 and Calculus	
BSCI 467	Freshwater Biology	4 (L)	F	Prereq: BSCI 207 or dept. perm.	
BSCI 473	Marine Ecology	3	Sp	BSCI 207	
BSCI475	Sexual Selection in Nature	3	F	BSCI207	
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.	
ENST 403	Invasive Species Ecology	3	F		
ENST 450	Wetland Ecology	3	F	BIOM 301. Offered "even" years, e.g., Fall 2016, 2018, etc.	
ENST 452	Wetland Restoration	3	Sp	BSCI160/161 & (BSCI362, ENST450, ENST360, or BSCI361)	
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 489O	Plant Taxonomy	3 (L)	Sp		

>> Ecology in Practice – Optional. Up to 3 credits to be applied to the Restricted Elective requirement

BSCI 399	Biology Department Research	3	Sp, F, Su	Dept. permission	
ENSP 386	ENSP Internship	3	Sp,Su,Fa	ENSP386 Intern. prop. (approved in adv.)	
ENST 314	Fisheries Management and Sustainability	3	TBD	Prereq: one year of biology.	
ENST 460	Principles of Wildlife Management	3	Fa	BSCI361; 2 sem. of lab. bio	
ENST 461	Urban Wildlife Management	3	F	-	
ENST 479	Tropical Ecol and Resource Mgmt	3	Sp	BSCI 160/161 and perm. Has a required travel-study component.	
GEOG373	Geographic Information Systems	3	Sp, F, Su W		