

# ENSP – Biodiversity and Conservation Biology

Reviewed 1.9.15 - WW

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>

ENSP Core				UM General Education		
All				Fundamental Studies (15 credits)		
Course	Title	Offered	Grade	Requirements	Course	Cr/AP/IB/D
ENSP101 (NS) ENSP102 (HS) ENSP400 (SP)	Intro to Env Science Intro to Env Policy Capstone	Fa Sp Fa,Sp		Academic Writing (AW)		3
Calculus (one) MATH220 (MA) MATH130 (MA) MATH140 (MA)	Elem Calculus I Calc for Life Sciences I Calculus I ( <i>rec.</i> )	Fa,Sp,Su Fa,Sp,Su Fa,Sp,Su	Grade	Professional Writing (PW)		3
Statistics (one) BIOM301 (AR) GEOG306 (AR) PSYC200 (AR)	Intro to Biometrics Intro to Quant Methods Stat. Meth in Psych	Fa,W,Sp Fa,Sp Fa,Sp,Su	Grade	Oral Communication (OC)		3
All <u>3</u> courses below:				Math (MA)	Calculus	3-4
Biology BSCI106 (NL)	Princ of Biology II	Fa,Sp,Su	Grade	Analytical Reasoning (AR)	ENSP Stat	3
Chemistry CHEM131/132 (NL)	Gen Chemistry I / Lab	Fa,Sp,Su	Grade	Distributive Studies (25 credits)		
Earth Sci (one) GEOG201/211 (NL)	Geog of Env Sys / Lab	Fa,Sp,Su	Grade	Requirements	Course	Cr/AP/IB/D
And <u>one</u> course from <u>2</u> of the categories below:				Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
Economics (one) AREC240 (HS) AREC241 (HS, IS) ECON200 (HS)	Intro to Econ and Env Env, Econ, and Policy Princ of Micro-Econ	Sp Fa F,S,Su,W	Grade	Natural Science (NS)	ENSP 101	3
Govt /Pol (one) ENSP330 ENSP340 ENSP342 GVPT273 (SP)	Environmental Law Sci, Ethics, Law: Water Oceans: Integr. Policy Intro to Env Politics	Fa, Sp Fa Sp Sp	Grade	History and/or Social Sci (HS1)	ENSP 102	3
Geography (one) GEOG100 (HS) GEOG130 (HS or SP) GEOG140 (IS) GEOG202 (CC)	Intro to Geography Developing Countries Natural Disasters Human Geography	Fa, Su Fa, Su Fa Sp, Su	Grade	History and/or Social Sci (HS2)		4
ENSP Graduation Requirements				Humanities (HU1)		3
_____ Students must earn <u>C-</u> or <u>higher</u> in all courses used for ENSP Core and Concentration requirements.				Humanities (HU2)		3
_____ Students' major GPA must be 2.0 or higher.				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	Unique cr
				I- Series (IS)		3
				I- Series (IS)		3
				Diversity (4-6 credits)*		
				* May double-count with Distributive Studies		
				Requirements	Course	Cr/AP/Unique
				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
				An internship is <i>strongly recommended</i> but is not required in this concentration.	ENSP 386	3
ENSP Graduation Requirements				UM Graduation Requirements		
				_____ Up to 6 AP courses <b>may</b> be used for Gen Ed		
				_____ There are <b>at least</b> 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		

## ENSP – Biodiversity and Conservation Biology (cont'd)

REQUIREMENTS (31-32 cr): Students may use BSCI105 or BSCI106 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 105	Principles of Biology I	4	Sp, F, Su	Placement in MATH 220 or higher.	
BSCI 207	Organismal Biology	3	Sp, F	BSCI 105, BSCI 106 and CHEM	
BSCI 222	Principles of Genetics	4	Sp, F, Su	BSCI 105, 1 year college chemistry	
BSCI 361	Principles of Ecology	4	Sp, F	BSCI 106 and (MATH 140 or 220)	
BSCI 363	Biology of Cons and Extinction	3	Sp, F	BSCI 106	
BSCI 370	Principles of Evolution	3	F	BSCI 106	
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	—
MATH131	Calculus II for Life Sciences	4	Sp, F, Su	MATH 130 or 140	—
MATH 221	Elementary Calculus II	3	Sp, F, Su	MATH 220, 130, or 140, or equivalent	

RESTRICTED ELECTIVES (15 cr, including at least one laboratory (L) course).

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 334/335	Mammalogy	3/1 (L)	Sp	BSCI 106	
BSCI 337	Biology of Insects	4 (L)	F	BSCI 106	
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 105, 106, and 222	
BSCI 392	Biology of Extinct Animals	3	F	BSCI 106 and BSCI 207	
BSCI 393	Biology of Extinct Animals Lab.	1 (L)	F	Pre- or co-requisite: BSCI 392	
BSCI 460	Plant Ecology	3	F	BSCI 106	
BSCI 461	Plant Ecology Laboratory	2 (L)	F	Pre- or corequisite: BSCI 460	
BSCI 462	Population Ecology	3	S	BSCI 106 and MATH 220	
BSCI 465	Behavioral Ecology	3	Varies		
BSCI 467	Freshwater Biology	4	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*	<i>*Offered in Spring of "even" years (2014, 2016, etc.)</i> Prereq: one year of biology	
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. <i>Offered "even" years, e.g., Fall 2014</i>	
ENST 460	Principles of Wildlife Management	3	Fa	2 semesters of lab. Biology	
ENST 461	Urban Wildlife Management	3	F	-	
ENST 479	Tropical Ecol and Resource Mgmt	3	Sp	BSCI 106 and perm. <i>Course has required travel-study component.</i>	
GEOG 372	Remote Sensing	3	F,W,Sp,Su		
GEOG 373	Geographic Information Systems	3	F,W,Sp,Su		
GEOG 418	Field & Lab Tech in Env Science	3	F	<i>The field component takes place in summer. Contact instructor for info and perm.</i>	
GEOG 442	Biogeography	3	F	BSCI 361 or GEOG 342 or equivalent	
GEOL 453	Ecosystem Restoration	3	F	MATH220, CHEM131/132, and (GEOL100 or ENST200).	
PLSC 471	Forest Ecology	3	Sp	BSCI 106 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: