

# ENSP – Environmental Economics

Reviewed 10.9.15 – WW

ENSP Core			
Course	Title	Offered	Grade
(all three) ENSP101 (NS) ENSP102 (HS) ENSP400 (SP)	Intro to Env Science Intro to Env Policy Capstone	Fa Sp Fa,Sp	
Calculus (one) MATH220 (MA) MATH140 (MA)	Elementary Calculus Calculus I ( <i>strongly recommended</i> )	Fa,Sp,Su Fa,Sp,Su	Grade
Statistics (one) BIOM301 (AR) ECON321 (AR) GEOG306 (AR) PSYC200 (AR) STAT400	Intro to Biometrics Economic Statistics ( <i>rec.</i> ) Intro to Quant Methods Stat. Meth in Psychology Applied Prob and Stat I	Fa,W,Sp Fa,Sp Fa,Sp Fa,Sp,Su Fa,Sp,Su	Grade
Choose <u>4</u> courses from the 5 categories below:			
Biology BSCI106 (NL)	Principles of Biology II	Fa,Sp,Su	Grade
Chemistry CHEM131/132 (NL)	General Chemistry I/Lab	Fa,Sp,Su	Grade
Earth Sci (one) AOSC200/201 (NL) ENST200 (NL) GEOG201/211 (NL) GEOL100/110 (NL)	Weather & Climate/Lab Fundamentals of Soil Sci Geog of Environ Sys/Lab Physical Geology/Lab	Fa,Sp Fa Fa,Sp,Su Fa,Sp,Su	Grade
Govt /Pol (one) ENSP330 ENSP340 ENSP342 GVPT273 (SP)	Environmental Law Sci, Ethics, Law: Water Oceans: Integrated Policy Intro to Env Politics	Fa, Sp Fa Sp Sp	Grade
Geography (one) GEOG100 (HS) GEOG130 (HS or SP) GEOG140 (IS) GEOG202 (CC)	Intro to Geography Developing Countries Natural Disasters World in Cultural Persp	Fa,Su Fa,Su Fa Sp,Su	Grade
And			
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
ENSP Graduation Requirements			
<p>_____ Students must earn <b>C- or higher</b> in all courses used for ENSP Core and Concentration requirements.</p> <p>_____ Cumulative GPA must be 2.0 or higher in all courses used for ENSP Core and Concentration requirements.</p>			

UM General Education		
Fundamental Studies (15 credits)		
Requirements	Course	Cr/AP/IB/D
Academic Writing (AW)		3
Professional Writing (PW)		3
Oral Communication (OC)		3
Math (MA)	Calculus	3-4
Analytical Reasoning (AR)	ENSP Stat	3
Distributive Studies (25 credits)		
Requirements	Course	Cr/AP/IB/D
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)	AREC/ECON	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/AP/IB/D
Understanding Plural Societies (UP)		3-6
Understanding Plural Societies (UP) <i>or</i> Cultural Competency (CC)		
Experiential Learning (0-3 credits)*		
* May overlap with major requirements		
Requirements	Course	Cr
An internship is <i>strongly recommended</i> but is not required.	ENSP 386	
UM Graduation Requirements		
<p>_____ <u>Up to 6 AP courses</u> <b>may</b> be used for Gen Ed</p> <p>_____ There are <b>at least 40 non-overlapping</b> Gen Ed credits</p> <p>_____ No more than 60 credits earned from Community College</p> <p>_____ Last 30 credits must be earned at Maryland</p> <p>_____ Major GPA must be 2.0 or higher.</p> <p>_____ 120+ cumulative credits <i>and</i> 2.0+ cum GPA</p>		

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### REQUIREMENTS (25 credits):

Course	Description	Cr	Offered	Prerequisites	Grade
AREC 453	Natural Resources and Public Policy	3	F	ECON 326	
<b>AREC 454</b>	<b>Economics of Climate Change</b>	<b>3</b>	<b>Sp</b>	<i>ECON 326. If not offered, see your advisor to discuss a substitution.</i>	
AREC 455	Economics of Land Use	3	F	ECON 326	
ECON 201	Princ of Macro-Economics	4	F,Sp	ECON 200*	
ECON 300	Methods and Tools for Econ Analysis	3	Sp, F	ECON 200*, ECON 201, and MATH 220. <i>NOTE: ECON 300 is not open to students who have completed MATH240 or 241</i>	
ECON 326	Intermed. Microeconomic Theory	3	Sp, F	ECON 300 or MATH 240 or MATH 241	
Select one: ECON 481 ECON 454	Environmental Economics ( <i>strongly rec</i> ) Theory of Publ. Fin. & Fiscal Fed	3 3	<i>rarely</i> Sp, F	ECON 326 ECON 326	
Select one: AREC 365 AREC 382 AREC 433 AREC 445 ECON 413 ECON 422 ECON 456	World Hunger, Pop, & Food Supplies Intro to Information from Econ Data Food and Agricultural Policy Agric. Dev., Pop. Growth & Environ. Information and Markets ** Quantitative Methods in Econ I ** Law and Economics **	3 3 3 3 3 3 3	Sp, F Sp F Sp F Sp, F, Su Sp	- Perm. of dept. ECON 306 or ECON 326 ECON 306 or ECON 326 ECON 326 ECON 200, 201, and 321 ECON 326	

\* The Economics department has agreed to accept AREC 240 for ECON 200 where ECON 200 is a listed pre-requisite.

\*\* Due to severe over-enrollment in Economics, ENSP students should prepare to enroll in AREC courses in this category.

RESTRICTED ELECTIVES: At least 12 credits in one (1) supporting area below: Social Science, Earth Science, Life Science, or Graduate School preparation.

#### >>> Area 1. Social Science

Course	Description	Cr	Offered	Prerequisites	Grade
ANTH 450	Theory & Practice of Environ Anthro	3	F		
GEOG 342	Introduction to Biogeography	3	Sp	GEOG 201. Recommended: GEOG 211	
GEOG 331	Intro to Human Dimen of Global Chng	3	F	GEOG 201 or 202; or ANTH 220 or 260	
GEOG 372	Remote Sensing	3	Sp, Su, W	-	
GEOG 373	Geographic Information Systems	3	F, Su,W	-	
GEOG 431	Culture and Natural Resource Mgt	3	F		
GEOG 435	Population Geography	3	Sp, Su,W	-	
GEOG 437	Political Geography	3	F	-	
GEOG 442	Biogeography	3	F	GEOG 342 or BSCI361	
GVPT 200	International Political Relations	3	Sp,Su,F,W	GVPT 100 or ENSP102	
GVPT 306	Global Ecpolitics	3	Sp	GVPT 200	
GVPT 406	International Political Economy	3		GVPT 200	
HIST 405	Environmental History	3	<i>varies</i>		
SOCY 305	Scarcity and Modern Society	3	Sp, F	3 credits of sociology	
SOCY 333	Technology and Society	3	Sp	3 credits of sociology	
SOCY 410	Social Demography	3	Sp, F	6 credits of sociology or dept perm	

*Cont'd over* →

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### >>> Area 2. Earth Science

Course	Description	Cr	Offered	Prerequisites	Grade
CHEM 104	Fund of Organic and Biochem	3	Sp	No longer offered	
CHEM231/231	Organic Chemistry I	3/1	Sp, F	CHEM131/132	
ENCE 315	Intro to Environmental Eng.	3	Sp, F	No longer offered	
ENST 413	Soil and Water Conservation	3	Sp	ENST 200	
ENST 423	Soil-Water Pollution	3	Sp	ENST 200 and CHEM 231/232 or dept. perm.	
ENST 440	Crops, Soils, and Civilization	3	Sp		
ENST 441	Sustainable Agriculture	3	Fa		
ENST 451	Water Quality: Field and Lab Analysis	3	Sp	CHEM 231/232	
ENST 454	Env. Issues in Plant & Soil Sci	3	varies	No longer offered	
GEOL 340	Geomorphology	4	Sp	GEOL 100/110	
GEOL 341	Structural Geology	4	F	GEOL 102 or permission of dept.	
GEOL 452	Watershed and Wetland Hydr	3	F	CHEM 131/132 and GEOL 100/110 or perm.	
LARC 450	Environmental Resources	3	F	ENST 200 or permission of dept.	

### >>> Area 3. Life Science

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 207	Organismal Biology	4	Sp,Su,F	BSCI 105, BSCI 106 and CHEM 131/132	
BSCI 361	Principles of Ecology	4	Sp	BSCI 106 and (MATH 140 or MATH 220)	
BSCI 363	Biol of Conserv and Extinction	3	Sp	BSCI 106	
BSCI 366	Biodiversity Issues in Conserv. Mgmt.	3	F	BSCI 207 or dept. permission	
BSCI 370	Principles of Evolution	3	F	BSCI 106	
BSCI 374	Chesapeake Bay Lab	2	F	Pre- or corequisite: BSCI 373	
BSCI 460	Plant Ecology	3	Sp	BSCI 106	
BSCI 461	Plant Ecology lab	2	Sp	Pre- or corequisite: BSCI 460	
BSCI 462	Population Ecology	3	F	BSCI 106 and MATH 220	
BSCI 463	Laboratory and Field Ecology	2	F	Pre- or coreq.: BSCI 462 & a statistics course	
BSCI 473	Marine Ecology	3	F	BSCI 207	
ENST 373	Natural History of the Ches Bay	3	F	course in biological sciences or dept. perm.	
ENST 450	Wetland Ecology	3	F	BIOM 301 or permission of dept.	
ENST 460	Principles of Wildlife Mgmt	3	Sp	-	
ENST 461	Urban Wildlife Management	3	F	-	
ENST 479	Trop Ecol and Resource Mgmt.	1-6	Sp		

### >>> Area 4. Preparation for Graduate Work in Environmental Economics: Mathematics, Theory, Econometrics

Course	Description	Cr	Offered	Prerequisites	Grade
MATH 141	Calculus II	4	Sp, Su, F	MATH 140 or equivalent	
MATH 240	Introduction to Linear Algebra	4	Sp, Su, F	MATH 141 or equivalent	
MATH 241	Calculus III	4	Sp, Su, F	MATH 141 and MATH 240	
ECON 321	Economic Statistics	3	Sp, Su, F	ECON 200 and 201, MATH 220 or MATH 140	
ECON 414	Game Theory	3	Sp, F	ECON 306 and (MATH 220 or 140)	
ECON 415	Strategic behavior and Incentives	3	Sp	ECON 414 or permission of dept.	
ECON 422	Quantitative Methods in Econ I	3	Sp,F	ECON 200, 201 and ECON 321 or perm	
ECON 425	Mathematical Economics	3	Su	ECON 305 or 405; ECON 306 or 406; and MATH 220 or 140.	