

ENSP – Environment and Agriculture

Effective -- Fall 2016

Reviewed 10.12.16 - WW

ENSP Core				General Education		
All				Fundamental Studies (15 credits)		
Course	Title	Offered	Grade	Requirements	Course	Cr
ENSP101 (NS) ENSP102 (HS) ENSP400 (SP)	Intro to Env Science Intro to Env Policy Senior Capstone	Fa Sp Fa,Sp		Academic Writing (AW)		3
Applied Science and Policy (one)				Distributive Studies (25 credits)		
ENSP305 ENSP330 ENSP340 ENSP342 ENSP350	Quant. Methods Environmental Law Sci, Ethics, Law: Water Oceans: Integ. Policy Energy: Science & Policy	Sp Fa, Sp Fa Sp TBA		Requirements		
Calculus (one)				Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
MATH120 (MA) MATH140 (MA)	Elementary Calculus Calculus I (<i>recommended</i>)	Fa,Sp,Su Fa,Sp,Su	Grade	Natural Science (NS)	ENSP 101	3
Statistics (one)				History and/or Social Sci (HS1)	ENSP 102	3
BIOM301 (AR) GEOG306 (AR) PSYC200 (AR)	Intro to Biometrics Intro to Quant Methods Stat Methods in Psyc	Fa,W,Sp Fa,Sp,Su, Fa,Sp,Su	Grade	History and/or Social Sci (HS2)		4
Four (4) courses from the 5 groups below:				Humanities (HU1)		3
Biology (req'd)				Humanities (HU2)		3
BSCI160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade	Scholarship in Practice (SP, major)	ENSP 400	3
Chemistry (req'd)				Scholarship in Practice (SP, non-major)		3
CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade	I-Series (6 credits)*		
Earth Sci (req'd)				* May double-count with Distributive Studies		
ENST 200 (NL)	Princ of Soil Science	Fa	Grade	Requirements	Course	Cr
Economics (one)				I- Series (IS)		3
AREC240 (HS) AREC241 (HS, IS) ECON200 (HS)	Intro to Econ and Env Env, Econ, and Policy Princ of Microeconomics	Sp Fa Fa, Sp, W		I- Series (IS)		3
Geography (one)				Diversity (4-6 credits)*		
GEOG130 (HS) GEOG140 (IS) GEOG170 (NS) GEOG202 (CC)	Developing Countries Natural Disasters Meth of Geospatial Anal Intro to Human Geog	Fa,Su Fa, Sp Fa Sp		* May double-count with Distributive Studies		
ENSP Graduation Requirements				Requirements	Course	Cr
_____ 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.				Understanding Plural Societies (UP)		3-6
				Understanding Plural Societies (UP) <i>or</i> Cultural Competency (CC)		0-3
ENSP Graduation Requirements				Experiential Learning (0-3 credits)*		
_____ Up to 6 AP courses may be used for Gen Ed _____ There are at least 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				* 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 _____ There are at least 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 – Environment and Agriculture (cont'd)

REQUIREMENTS:

>>> Fundamentals and Background (18-19 credits):

Course	Description	Cr	Offered	Prerequisites	Grade
ANSC 101/103	Principles of Animal Science and Lab	3/1	F	Must be declared in ENSP-E&A	
BSCI 170/171	Cellular and Molecular Biology	4	F, Sp, Su	MATH 220 placement or higher	
BSCI 222 <i>or</i> PLSC 203	Genetics <i>or</i> Plants, Genes and Biodiversity	4 3	F, Sp, Su Sp	BSCI 170/171 and one year chemistry BSCI 170/171	
CHEM 231/232	Organic Chemistry I	4	F, Sp, Su	CHEM 131/132	
PLSC 101	Intro to Crop Science	4	F		

>>> Cartography, Remote Sensing, and GIS: Choose 2 courses (6 credits): *Grayed courses are not offered at this time*

Course	Description	Cr	Offered	Prerequisites	Grade
GEOG 475	Adv Computer Cartography	3	Sp	GEOG 373	
GEOG 372 <i>or</i> ENST 442	Remote Sensing <i>or</i> Remote Sensing of Ag and Nat Res	3	Sp, Su, W		
GEOG 472	Advanced Remote Sensing	3	Fa	GEOG 372	
GEOG 373 <i>or</i> ENST 415	Geographic Information Systems <i>or</i> GIS Applications in Soil Science	3 4	F, Su, W		
GEOG 473	Adv Geographic Information Systems	3	Sp	GEOG 373	

>>> Internship (3 credits):

Course	Description	Cr	Offered	Grade
ENSP 386	Internship	3-6	F, Sp, Su	

RESTRICTED ELECTIVES (15-19 credits): Choose five (5) courses in one area, which together with ENSP 386 provides integration and skill development (15-19 credits):

>>> Area 1. Crop production and plant protection *Grayed courses are not offered at this time*

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 361	Ecology	4	F, Sp	BSCI 160/161	
BSCI 442	Plant Physiology	4	Sp	BSCI223 and BSCI222	
PLSC 420* <i>recommended</i>	Plant Pathology	4	F	CHEM 104 or 231/232, and ENST 201	
ENST 411	Soil Fertility	3	Sp	ENST 200	
ENST 413 <i>or</i> ENST 423	Soil-Water Conservation <i>or</i> Soil-Water Pollution	4 3	F F	ENST 200 and CHEM 104 or perm.	
ENST 441	Sustainable Agriculture	3	F		
PLSC 403	Crop Breeding	3	Sp	BSCI 222 or permission	
PLSC 406	Forage Crops	3	Sp	BSCI 170/171	
PLSC 407	Cereal and Oil Crops	3	F	BSCI 170/171 and PLSC 101	
PLSC 453	Weed Science	3	F		

>>> Area 2. Human dimensions

Course	Description	Cr	Offered	Prerequisites	Grade
AREC 306	Farm Management	3	F		
AREC 365	World Hunger, Pop, and Food Supplies	3	F, Sp		
AREC 445	Agri Devmt, Pop Growth, and Env	3	Sp	ECON 200, 201 and AREC326 or perm	
AREC 455	Land Use Economics	3	F	ECON 200, 201 and AREC326 or perm	
ECON 315	Econ Dev of Underdeveloped Areas	3	Sp	ECON 200 and 201 or perm.	
GEOG 312	Geog of US and Canada	3	Su		
GEOG 3xx	Regional Geog (Latin America; Africa, etc).	3	varies		
GEOG 431	Culture and Natural Resource Mgmt	3	F		
GVPT 306	Global Ecopolitics	3	Sp	GVPT 200	
ENST 440	Soils, Crops and Civilization	3	Sp		
ENST 441	Sustainable Agriculture	3	F		
PLSC 303	International Crop Production	3	Sp	BSCI 170/171	
SOCY 305 <i>or</i> SOCY 405	Scarcity in Modern Society <i>or</i> Scarcity in Modern Society	3 3	Sp Sp	3 cr SOCY or ENSP102	

>>> Advisor notes, approved course substitutions, etc.