# **ENSP - Environment and Agriculture**

Reviewed 4.21.16 - WW

## **ENSP Core**

Course	Title	Offered	Grade
All			
ENSP101 (NS)	Intro to Env Science	Fa	
ENSP102 (HS)	Intro to Env Policy	Sp	
ENSP400 (SP)	Capstone	Fa,Sp	
Calculus (one)			Grade
MATH220 (MA)	Elem Calculus I	Fa,Sp,Su	
MATH140 (MA)	Calculus I (rec)	Fa,Sp,Su	
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Statistics (one)			Grade
BIOM301 (AR)	Intro to Biometrics	Fa,W,Sp	
GEOG306 (AR)	Quant Methods	Fa,Sp	
PSYC200 (AR)	Stat. Meth in Psych	Fa,Sp,Su	
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#### All 4 courses below:

Biology			Grade
BSCI106 (NL)	Princ of Biology II	Fa,Sp,Su	
Chemistry			Grade
CHEM131/132 (NL)	Gen Chemistry I/ Lab	Fa,Sp,Su	
Earth Sci ENST200 (NL)	Fund of Soil Science	Fa	Grade
Economics (one) AREC240 (HS) AREC241 (HS, IS) ECON200 (HS)	Intro Econ and Env Env, Econ, Policy Micro-Econ	Sp Fa Fa,W,Sp,Su	Grade

#### Choose <u>1</u> course from <u>one</u> category below:

Govt /Pol (one)			Grade
ENSP330	Environmental Law	Fa, Sp	
ENSP340	Sci & Policy: Water	Fa	
ENSP342	Oceans: Integr. Pol	Sp	
GVPT273 (SP)	Intro to Env Politics	Sp	
Geography (one)			Grade
GEOG100 (HS)	Intro to Geography	Fa,Su	
GEOG130 (HS or SP)	Dev Countries	Fa, Su	
GEOG140 (IS)	Natural Disasters	Fa	
GEOG202 (CC)	Human Geography	Sp,Su	
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## **ENSP Graduation Requirements**

\_\_\_\_\_ Students must earn <u>C- or higher</u> in all courses used for ENSP Core and Concentration requirements.

\_\_ Students' major GPA must be 2.0 or higher.

## **UM General Education**

Fundamental Studies (15 credits)

Requirements	Course	Cr/AP/IB/D
Academic Writing (AW)	Course	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)	AREC240	3
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	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

may overlap with major requirements		
Requirements	Course	Cr
An internship is required in this concentration.	ENSP 386	3

## **UM Graduation Requirements**

Up to 6 AP courses may be used for Gen Ed

There are <u>at least 40 non-overlapping</u> Gen Ed credits

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

## 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		
BSCI 105	Principles of Biology I	4	F, Sp, Su	MATH 220 placement or higher	
BSCI 222 or	Genetics or	4	F, Sp, Su	BSCI 105 and one year chemistry	
PLSC 203	Plants, Genes and Biodiversity	3	Sp	BSCI 105	
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 no longer offered.* 

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

Course	Description	Cr	Offered	Prerequisites	Grade
BSCI 361	Ecology	4	Sp	BSCI 106	
PLSC 442 or	Plant Physiology or	4	F		
PLSC 400	Principles of Plant Physiology	4	Sp		
PLSC 420	Plant Pathology	4	F	CHEM 104 or 231/232, and ENST 201	
ENST 411	Soil Fertility	3	Sp	ENST 200	
ENST 413 or	Soil-Water Conservation or	4	F	ENST 200 and CHEM 104 or perm.	
ENST 423	Soil-Water Pollution	3	F		
ENST 441	Sustainable Agriculture	3	F		
PLSC 403	Crop Breeding	3	Sp	BSCI 222 or permission	
PLSC 406	Forage Crops	3	Sp	BSCI 105	
PLSC 407	Cereal and Oil Crops	3	F	BSCI 105 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 and Caribbean; Africa; or other underdeveloped regions).	3	varies		
GEOG 431	Culture and Natural Resource Mgmt	3	F		
GVPT 306	Global Ecopolitics	3	Sp, Su	GVPT 200	
ENST 440	Soils, Crops and Civilization	3	Sp		
ENST 441	Sustainable Agriculture	3	F		
PLSC 303	International Crop Production	3	Sp	BSCI 105	
SOCY 305	Scarcity in Modern Society	3	Sp	3 cr SOCY or ENSP102	