

ENSP – Soil, Water, and Land Resources

Effective Fall 2016 and beyond

Updated 9/16/19 – ABM

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				General Education		
All				Fundamental Studies (15 credits)		
Course	Title	Offered	Grade	Requirements	Course	Cr
ENSP101 (NS)	Intro to Env Science	Fa		Academic Writing (AW)		3
ENSP102 (HS)	Intro to Env Policy	Sp		Professional Writing (PW)		3
ENSP400 (SP)	Senior Capstone	Fa,Sp		Oral Communication (OC)		3
Applied Science and Policy (one)				Math (MA)		
ENSP305	Applied Quant. Methods in Env. Sci & Policy	Sp		Math (MA)	Calculus	3-4
ENSP330	Environmental Law	Fa, Sp		Analytical Reasoning (AR)	Statistics	
ENSP342	Sci, Ethics, Law: Water	Fa		Distributive Studies (25 credits)		
ENSP342	Oceans: Integ. Policy	Sp		Requirements		
ENSP350	Energy: Science & Policy	TBA		Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
Calculus (one)				Natural Science (NS)	ENSP 101	3
MATH120 (MA)	Elementary Calculus	Fa,Sp,Su	Grade	History and/or Social Sci (HS1)	ENSP 102	3
MATH130 (MA)	Calculus for Life Sciences	Fa,Sp,Su		History and/or Social Sci (HS2)		4
MATH140 (MA)	Calculus I (<i>recommended</i>)	Fa,Sp,Su		Humanities (HU1)		3
Statistics (one)				Humanities (HU2)		3
BIOM301 (AR)	Intro to Biometrics	Fa,W,Sp	Grade	Scholarship in Practice (SP, major)	ENSP 400	3
GEOG306 (AR)	Intro to Quant Methods	Sp,Su, W		Scholarship in Practice (SP, non-major)		3
PSYC200 (AR)	Stat Methods in Psyc	Fa,Sp,Su		I-Series (6 credits)*		
Four (4) courses from the 5 groups below:				* May double-count with Distributive Studies		
Biology (req'd)				Requirements		
BSCI160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade	I- Series (IS)		3
Chemistry (req'd)				I- Series (IS)		3
CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade	Diversity (4-6 credits)*		
Earth Science (both)				* May double-count with Distributive Studies		
ENST200 (NL) <i>and</i>	Princ of Soil Science	Fa	—	Requirements		
GEOG201/211 (NL) <i>or</i>	Geog of Env Systems	Fa,Sp,Su	—	Understanding Plural Societies (UP)		3-6
GEOL100/110 (NL)	Physical Geology	Fa,Sp,Su		Understanding Plural Societies (UP) <i>or</i> Cultural Competency (CC)		0-3
Economics (one)				Experiential Learning (0-3 credits)*		
AREC240 (HS)	Intro to Econ and Env	Sp		* May overlap with major requirements		
AREC241 (HS, IS)	Env, Econ, and Policy	Fa		Requirements		
ECON200 (HS)	Princ of Microeconomics	Sp,Fa,W		Practical experience is <i>strongly recommended</i> in this concentration		
Geography (one)				Graduation Requirements		
GEOG130 (HS)	Developing Countries	Fa,Su		Up to 6 AP courses may be used for Gen Ed		
GEOG140 (IS)	Natural Disasters	Fa, Sp		No more than 60 credits earned from Community College		
GEOG170 (NS)	Meth of Geospatial Anal	Fa		Last 30 credits must be earned at Maryland		
GEOG202 (CC)	Intro to Human Geog	Sp		120+ cumulative credits <i>and</i> 2.0+ cum GPA		
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.						

ENSP – Soil, Water, and Land Resources (cont'd)

REQUIREMENTS (18-22 credits): Shaded courses are no longer being offered.

Course	Description	Cr	Offered	Prerequisites	Grade
Select one: GEOG372	Remote Sensing	3	F,Su,W	-	_____
Select one: GEOG340	Geomorphology	4	Sp	GEOL100	_____
Select one: GEOG340	Geomorphology	3	TBA	Offered Summer or Winter, if offered.	_____
Select one: GEOG451	Groundwater Geology	3	F	Check with professor	_____
GEOG452	Watershed and Wetland Hydrology	3	F	Check with professor	_____
ENST417*	Soil Hydrology and Physics	3	F	ENST200 & course in physics; check w/prof.	_____
Select two: ENST301,	Skill development: Field Soil Morph I	1	Sp	Permission of dept	_____
ENST302,	Field Soil Morph II	1	Sp	Permission of dept	_____
& ENST303	Field Soil Morph II	1	Sp	Permission of dept	_____
	<i>soil judging or intensive field course; ck with advisor.</i>	1			_____
ENST415	Renewable Energy	3	F	CHEM131, PHYS121 & MATH113; perm of dept.	_____
ENST423	Soil and Water Pollution	3	Sp	ENST200 and CHEM231/232 or permission of dept.; check with your advisor	_____
Select two: ENST411	Depth: Principles of Soil Fertility	3	F	ENST200 or equivalent.	_____
ENST414	Soil Morphology Genesis & Class.	4	F	ENST200	_____
ENST417*	Soil Hydrology and Physics	3	F	ENST200 & course in physics; or dept. perm.	_____
ENST421	Soil Chemistry	4	Sp	ENST200	_____
ENST422	Soil Biochem & Microbial Ecology	3	F	ENST200 or dept. perm	_____

RESTRICTED ELECTIVES: At least 3 courses and 9 credits.

Students may suggest additions to this list by bringing a course syllabus to the faculty advisor and explaining how the course relates to their long-term academic or career interests.

Course	Description	Cr	Offered	Prerequisites	Grade
ENCE310	Introduction to Env. Engineering	3	Fa, Sp	PHYS260 and ENCE215; and perm. of dept.	
ENST430	Wetland Soils	3	Sp	ENST200	
ENST440	Crops, Soils and Civilization	3	Sp	-	
ENST450	Wetland Ecology	3	F	Meets in even years, e.g., 2016, 2018, etc.	
GEOG345	Introduction to Climatology	3	F		
GEOG373	Geographic Information Systems	3	Sp,F,W, Su	<i>*recommended</i>	
GEOG475	Advanced Computer Cartography	3	Sp	GEOG 373	
GEOG472	Remote Sensing	3	Fa	GEOG 372	
GEOG473	Geog. Info. Sys. and Spatial Anal.	3	Sp	GEOG 373 and GEOG306 or equivalent.	
ENSP386	Internship	3	Sp,F,Su	Internship proposal approved	

Recommended preparation for GRADUATE SCHOOL in Soil and Water Sciences: MATH 141 or MATH 121; PHYS 121 and 122; CHEM 231/232 and 241/242.

Advisor notes and approved course substitutions: