

# LAND USE – CORE Program

As of: 3.27.15

**UM Core:** ENGL 101 \_\_\_\_\_, (HL) \_\_\_\_\_, (HA) \_\_\_\_\_, (HL/HA/HO/IE) \_\_\_\_\_, (SH) \_\_\_\_\_, Diversity \_\_\_\_\_  
 Adv. Writing \_\_\_\_\_, Adv. Studies \_\_\_\_\_, (SB) \_\_\_\_\_, (SB/IE) \_\_\_\_\_.

Grading Policy: Environmental Science and Policy students must earn C- grades or higher in all ENSP core courses and in all required courses and restricted electives in the concentration.

Required from ENSP Core:

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
All three:							
ENSP 101 (PS)	Intro. to Environmental Science	3	F	-	___	_____	_____
ENSP 102	Intro. to Environmental Policy	3	Sp	-	___	_____	_____
ENSP 400 (AS)	Capstone in Env. Sci & Policy	3	Sp, F	Senior year; ENSP 101 and 102	___	_____	_____
Calculus:							
MATH 140 (MS) <i>or</i> MATH 220 (MS)	Calculus I Elementary Calculus I	4 3	Sp, F, Su Sp, F, Su	dept. perm. Or MATH 115 w/C or better dept. perm. or MATH 113, or 115	___ ___	_____ _____	_____ _____
Statistics (one):							
GEOG 306 <i>or</i>  BIOM 301 <i>or</i> PSYC 200	Quant Methods for Geo Sci. ( <i>strongly recommended</i> )  Introduction to Biometrics Intro. Statistics for Psychology	3 3 3	Sp,F,W,Su  Sp,Fa,W Sp, F, Su	MATH 115  MATH 111 or equiv.	___ ___	_____ _____	_____ _____
Biology:							
BSCI 106 (LL)	Principles of Biology II	4	Sp, F, Su	placement in MATH 220			
Earth Sciences:							
GEOG 201/211 (PL)	Geography of Env Systems/Lab	3/1	Sp,F,Su	-			
Economics (one):							
AREC 240 (SB) AREC 241 ECON 200 (SB)	Intro. to Economics and the Envir. Environment, Econ., and Policy Principles of Micro-Economics	4 4 4	Sp Fa Sp, F, Su	MATH 220 or higher recommended MATH 220 or higher recommended MATH 110 or higher	___ ___	_____ _____	_____ _____
Geography:							
GEOG 202 (SB)	Intro to Human Geography	3	Sp, Su,W				

And: One (1) course from one of the following 2 groups:

Chemistry:							
CHEM 131/132 (PL)	General Chemistry I	3/1	Sp, F, Su	placement in MATH 113 or higher			
Govt & Politics (one):							
ENSP 330 ENSP 340 ENSP 342 GVPT 273	Introduction to Environmental Law Water: Science, Ethics, and Law Oceans: Integrated Policy Intro. to Environmental Politics	3 3 3 3	F, S F S Sp	Permission of dept; Junior standing. Permission of dept; Junior standing. Permission of dept; Junior standing. GVPT 170 or ENSP 102	___ ___ ___ ___	_____ _____ _____ _____	_____ _____ _____ _____

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Required for LAND USE:

TECHNIQUES AND METHODS - 6 credits:

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
GEOG 372	Remote Sensing	3	F, S,Su,W				
GEOG 373	Geographic Information Systems	3	F,S,Su,W				

LOWER LEVEL FOCUS - 3-4 credits: Select as you consider your upper-level focus (below)

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
One of:					_____	_____	_____
GEOG 130	Developing Countries	3	F, Su	CHEM 131/132	_____	_____	_____
GEOG 140	Natural Disasters	3	F		_____	_____	_____
GVPT 260	State and Local Government	3	Sp		_____	_____	_____
ENST 200	Fundamentals of Soil Science	4	Fa		_____	_____	_____
URSP 100	Challenge of the Cities	3	F		_____	_____	_____

- Approved substitute:

RESTRICTED ELECTIVES - 22-24 credits. **Students must take at least 8 courses, including at least one course and 3 credits from each of the five (5) areas below:**

Area 1 - Social/Cultural Dimensions - choose at least 1 course and 3 credits

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
ANTH 450	Environmental Anthropology	3	F	Junior standing			
ENST 440	Crops, Soils, and Civilization	3	Sp				
GEOG 212 *	Research/Lab in Cultural Geog	1	F, Sp	<i>Strongly recommended for grad school in Geography, planning, or related areas.</i>			
GEOG 332	Economic Geography	3	Fa				
GEOG 434	The Contemporary City	3	Sp	No longer offered.			
GEOG 435	Population Geography	3	Sp				
GVPT 461	Metropolitan Government	3	Sp				
SOCY 305	Scarcity in Modern Society	3	F, Sp				

Area 2 - Technical Skills - choose at least 1 course and 3 credits. *Asterisked \* courses are strongly recommended for students planning on graduate school in Geography or Regional Planning. Students planning to go into Geographic Information Science should also take GEOG 476 and an additional statistics course.*

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
GEOG 415	Land Use, Climate Chg and Sust	3	Sp	GEOG 201/211, GEOG 306 or equiv			
GEOG 418	Field and Lab Tech. in Env Science	3	F	<i>Field component takes place in the summer; check Sched of Classes. Dept. permission req'd.</i>			
GEOG 432	Location and Spatial Analysis	3	Sp	No longer offered			
GEOG 472 *	Rem Sensing, Digital Proc and Anal.	3	F	GEOG 372			
GEOG 473 *	Applications of GIS	3	Fa,Sp	GEOG 373			
GEOG 475	Adv Cartography	3	Sp	GEOG 373			
GEOG 476	Programming for Geographers	3	Fa	GEOG 373, 376, and 306			

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Area 3 – Regional Dimensions – choose at least 1 course and 3 credits

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
AREC 455	Economics of Land Use	3	F	AREC 326			
ENST 373	Nat History of the Chesapeake Bay	3	F	A course in Biology or dept perm			
GEOG 310	Maryland	3	Sp, Su				
GEOG 312	US and Canada	3	Fa, Su				
GEOG 313	Latin America and the Caribbean	3	Fa				
GEOG 410	Washington, DC : Past and Present	3	Sp				

Area 4 – Ecological Dimensions – choose at least 1 course and 3 credits

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
BSCI 361 <i>or</i> GEOG 342	Ecology <i>or</i> Biogeography	4 3	Sp Sp	BSCI 106 and (MATH 140 or 220) GEOG 201/211	____ ____	____ ____	
BSCI 460	Plant Ecology	3	F	BSCI 106			
BSCI 462	Population Ecology	3	F	BSCI 106 and MATH 220			
GEOG 442	Biogeography and Env Change	3	F	GEOG 342			
ENST 430	Wetland Soils	3	Sp	ENST 200			
GEOL453	Ecological Restoration	3	F	Junior standing.			
ENST 450	Wetland Ecology	3	F of even years	BIOM 301 or permission			
ENST 460	Wildlife Management	3	F	BSCI106.			
ENST 461	Urban Wildlife Management	3	F				
PLSC 471	Forest Ecology	3	Sp	BSCI 106 or PLSC 201			

Area 5 – International Dimensions – choose at least 1 course and 3 credits

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
AREC 332	Intro to Natural Resources Policy	3	Sp	No longer offered.			
AREC 365	World Hunger, Pop, and Food Supply	3	Sp, F				
GEOG 331	Hum Dimensions of Global Chng	3	Sp	GEOG 201 or 202 or permission			
GEOG 456	Social Geog of Metro Areas	3	F	No longer offered.			
ENST 479	Tropical Ecol and Resource Mgmt	3	Sp	BSCI 106 and a course in Economics. <i>Course has a required study abroad component.</i>			

APPLICATION & SYNTHESIS – 6 credits

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
ENSP 386	Internship	3	F, Sp, Su	Dept. permission			
GEOG 431	Culture & Natural Resource Mgt	3	Fa				

- Advisor notes, substitutions, etc.