

ENSP – Marine & Coastal Management

Effective -- Fall 2016

Reviewed 8.2.16 - 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 ENSP350	Quant. Methods Environmental Law Sci, Ethics, Law: Water Energy: Science & Policy	Sp Fa, Sp Fa TBA		Requirements		
Calculus (one)				Natural Sciences w/Lab (NL)	ENSP Lab Sci	4
MATH140 (MA)	Calculus I	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) **	Intro to Biometrics Intro to Quant Methods	Fa,W,Sp Fa,Sp,Su,	Grade	History and/or Social Sci (HS2)		4
<i>** recommended</i>				Humanities (HU1)		3
Courses from each category as indicated below:				Humanities (HU2)		3
Biology				Scholarship in Practice (SP, major)	ENSP 400	3
BSCI160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade	Scholarship in Practice (SP, non-major)		3
Chemistry				I-Series (6 credits)*		
CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade	* May double-count with Distributive Studies		
Earth Sci (both, req'd)				Requirements		
GEOG201/211 (NL) AOSC200/201 (IS)	Geog Environ Sys/Lab Weather and Climate	Fa,Sp,Su Fa,Sp	Grade	I- Series (IS)	AOSC200	3
Economics (one)				I- Series (IS)		3
AREC240 (HS) AREC241 (HS, IS)	Intro to Econ and Env Env, Econ, and Policy	Sp Fa		Diversity (4-6 credits)*		
Geography (one)				* May double-count with Distributive Studies		
GEOG130 (HS) GEOG140 (IS) GEOG170 (NS)	Developing Countries Natural Disasters Meth of Geospatial Anal	Fa,Su Fa, Sp Fa		Requirements		
ENSP Graduation Requirements				Understanding Plural Societies (UP)		3-6
_____ Students must earn <u>C-</u> or higher in all courses used for ENSP Core and Concentration requirements.				Understanding Plural Societies (UP) or Cultural Competency (CC)		0-3
_____ Students' major GPA must be 2.0 or higher.				Experiential Learning (0-3 credits)*		
ENSP Graduation Requirements				* May overlap with major requirements		
_____ Up to 6 AP courses may be used for Gen Ed				Requirements		
_____ There are at least 40 non-overlapping Gen Ed credits				Practical experience is <i>required</i> in this concentration		
_____ No more than 60 credits earned from Community College				Graduation Requirements		
_____ Last 30 credits must be earned at Maryland				_____ Up to 6 AP courses may be used for Gen Ed		
_____ 120+ cumulative credits and 2.0+ cum GPA				_____ 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 and 2.0+ cum GPA		

ENSP – Marine and Coastal Management (cont'd)

UPPER LEVEL REQUIREMENTS (12 credits):

Course	Description	Cr	Offered	Prerequisites	Grade
AOSC 375/GEOL375	Introduction to the Blue Ocean	3	Fa	MATH 140.	
ENSP 342	Oceans & Coasts: Integrated Policy	3	Sp	ENSP101, ENSP102, and junior standing.	
GEOG 441	The Coastal Ocean	3	Sp	GEOG 201/211	
ENST 450	Wetland Ecology	3	F of even years, 2016, etc	BIOM 301. <i>Course may conflict with ENSP 400 and GEOG 373, so plan ahead, e.g., take GEOG373 Summer or Winter terms.</i>	

Approved course substitution:

>>> TECHNICAL REQUIREMENTS (6 credits):

Course	Description	Cr	Offered	Prerequisites	Grade
GEOG 372	Remote Sensing	3	Fa,Sp,Su,W		
GEOG 373	Geog Info Sys and Spatial Anal.	3	Fa,W,Su		

>>> SYNTHESIS: 6 credits

Course	Description	Cr	Offered	Prerequisites	Grade
ENSP 386	Internship	3	F,Sp	Dept. permission	
ENSP 400	Capstone	3	F,Sp	Senior standing and dept. permission	

RESTRICTED ELECTIVES (15 credits): Check course credit levels carefully to be sure they add up.

>>> **Area 1 – COASTAL SCIENCE** – must include at least two 300- or 400-level courses in Coastal Science:

Course	Description	Cr	Offered	Prerequisites	Grade
AOSC 400	Physical Meteorology of the Atmos	3	F	MATH 140 <i>or perm.</i>	
AOSC 401	Global Environment	3	Sp	AOSC 400	
BSCI 361	Ecology	4	F,Sp,Su	BSCI 160/161	
BSCI 375	Biological Oceanography	3	varies	BSCI 160/161 and BSCI 207	
BSCI 473	Marine Ecology	3	Sp	BSCI 160/161 and BSCI 207	
ENST 200	Fundamentals of Soil Science	4	Fa	CHEM 131/132.	
ENST 314	Fisheries and Sustainability	3	Sp*	<i>*Offered even years (2016, 2018, etc)</i>	
ENST 373	Natural History of the Ches Bay	3	Fa	One semester of biological science	
GEOG 340 <i>or</i> GEOL 340	Geomorphology	3	TBA	GEOG 201/211	
	Geomorphology	4	Fa	GEOL 100/110	
GEOG398 B	Adv Geog Environmental Sys	3	Sp	GEOG201/211	
GEOG 472	Advanced Remote Sensing	3	Fa	GEOG 372	
GEOG 473	Advanced Geog. Info. Systems	3	F, Sp	GEOG 373	
GEOL 452	Watershed and Wetland Hydrology	3	Fa	MATH 140, GEOL 100, CHEM 131/132, <i>or perm</i>	
GEOL 453`	Ecosystem Restoration	3	Fa	Jr. standing	

>>> Area 2 – MANAGEMENT & GRADUATE SCHOOL PREPARATION

>>> **2a – Management** – must include at least one 300- or 400-level course in Management, below. Students may not use a course here to double-count with ENSP Core, e.g., ENSP330 or ENSP340.

Course	Description	Cr	Offered	Prerequisites	Grade
ANTH 450	Theory and Prac of Env. Anth	3	F	Junior standing	
ANTH 454	Anth of Travel and Tourism	3	Varies		
AREC 453	Natural Resources and Public Policy	3	F	ECON 200, 201 and AREC 326	
AREC 454	Economics of Climate Change	3	Sp	ECON 200, 201 and AREC 326	
AREC 455	Economics of Land Use	3	F	ECON 200, 201 and AREC 326	
ENSP 330	Environmental Law	3	F, S	Junior standing; dept. perm.	
ENSP 340	Water: Science, Ethics and Law	3	Fa	Junior standing; dept. perm.	
GEOG 415	Land Use, Climate Change, & Sust.	3	Sp	GEOG 201/211, GEOG 306 or equiv	
GEOG 431	Culture and Natural Resource Mgmt	3	F		

>>> **2b – Graduate school preparation** – may use up to two courses below as Restricted Electives.

Course	Description	Cr	Offered	Prerequisites	Grade
MATH 141	Calculus II	4	F,Sp,Su	MATH 140	
CHEM 231/232	Organic Chemistry	4	F,Sp,Su	CHEM 131/132	
PHYS 141	Physics	4	F,Sp	No longer offered	
PHYS161/174	Gen Physics & lab	4	F,Sp,Su	MATH141	