

ENSP – Marine & Coastal Management

Effective -- Fall 2016

Updated 6/1/18 - ABM

ENSP Core			
Course	Title	Offered	Grade
All			
ENSP101 (NS)	Intro to Env Science	Fa	
ENSP102 (HS)	Intro to Env Policy	Sp	
ENSP400 (SP)	Senior Capstone	Fa,Sp	
Applied Science and Policy (one)			
ENSP305	Quant. Methods	Sp	
ENSP330	Environmental Law	Fa, Sp	
ENSP340	Sci, Ethics, Law: Water	Fa	
ENSP350	Energy: Science & Policy	TBA	
Calculus (one)			
MATH140 (MA)	Calculus I	Fa,Sp,Su	Grade
Statistics (one)			
BIOM301 (AR)	Intro to Biometrics	Fa,W,Sp	Grade
GEOG306 (AR) **	Intro to Quant Methods	Fa,Sp,Su,	
** recommended			

Courses from each category as indicated below:

Biology			
BSCI160/161 (NL)	Ecology & Evolution/Lab	Fa,Sp,Su	Grade
Chemistry			
CHEM131/132 (NL)	Gen Chemistry I/Lab	Fa,Sp,Su	Grade
Earth Sci (both, req'd)			
GEOG201/211 (NL)	Geog Environ Sys/Lab	Fa,Sp,Su	Grade
AOSC200/201 (IS)	Weather and Climate	Fa,Sp	
Economics (one)			
AREC240 (HS)	Intro to Econ and Env	Sp	
AREC241 (HS, IS)	Env, Econ, and Policy	Fa	
Geography (one)			
GEOG130 (HS)	Developing Countries	Fa,Su	
GEOG140 (IS)	Natural Disasters	Fa, Sp	
GEOG170 (NS)	Meth of Geospatial Anal	Fa	

ENSP Graduation Requirements

_____ 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.

General Education		
Fundamental Studies (15 credits)		
Requirements	Course	Cr
Academic Writing (AW)		3
Professional Writing (PW)		3
Oral Communication (OC)		3
Math (MA)	Calculus	3-4
Analytical Reasoning (AR)	GEOG306	

Distributive Studies (25 credits)		
Requirements	Course	Cr
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)		4
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	Cr
I- Series (IS)	AOSC200	3
I- Series (IS)		3

Diversity (4-6 credits)*		
* May double-count with Distributive Studies		
Requirements	Course	Cr
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		
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 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	GEOG140 or course w/ comparable content	
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>	Geomorphology	3	TBA	GEOG 201/211	
GEOL 340	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	