

MARINE & COASTAL MANAGEMENT – CORE Program

Reviewed: 3.27.15

UM Core: ENGL 101 _____, (HL) _____, (HA) _____, (HL/HA/HO/IE) _____, (SH) _____, Diversity _____
 Adv. Writing _____, Adv. Studies _____, (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 of the selected area of concentration.

Required from ENSP Core:

Course	Title	Cr	Offered	Prerequisites	Grade	Completed	Notes
All three: ENSP 101 (PS) ENSP 102 ENSP 400 (AS)	Intro. to Environmental Science Intro. to Environmental Policy Capstone in Env. Sci & Policy	3 3 3	F Sp Sp, F	- - Senior year; ENSP 101 and 102	____ ____ ____	____ ____ ____	____ ____ ____
Calculus: MATH 140 (MS)	Calculus I	4	Sp, F, Su	Placement or MATH 115 w/C or better	____	____	____
Statistics (one): BIOM 301 <i>or</i> GEOG 306	Introduction to Biometrics Introduction to Quant. Methods <i>(strongly recommended)</i>	3 3	Sp, F Sp, Su	MATH 115	____	____	____
Biology: BSCI 106 (LL)	Principles of Biology II	4	Sp, F, Su	placement in MATH 220 or higher			
Chemistry: CHEM 131/132 (PL)	General Chemistry I	3/1	Sp, F, Su	placement in MATH 220 or higher			
Earth Sciences: GEOG 201/211 (PL) <i>and</i> AOSC 200/201 (PL)	Geography of Env. Systems/Lab. Weather and Climate/Lab	3/1 3/1	F, Sp, Su Sp, F	- MATH 110 or 115.	____ ____	____ ____	____ ____
Economics (one): AREC 240 (SB) AREC 241	Intro. to Econ and the Envir. Environment, Econ., and Policy	4 4	Sp Fa	MATH 220 or higher recommended MATH 220 or higher recommended	____ ____	____ ____	____ ____
Geography: GEOG 140 (PS)	Natural Disasters	3	F	-	____	____	____

Requirements for MARINE & COASTAL MANAGEMENT

UPPER LEVEL REQUIREMENTS: 12 credits

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
AOSC 375/GEOL375	Introduction to the Blue Ocean	3	Fa	MATH 140.			
ENSP 342	Threats to Oceans and Coasts: Integrated Policy Response	3 3	Sp	ENSP101 and ENSP102; and junior standing.			
GEOG 441	The Coastal Ocean	3	Sp	GEOG 201/211			
ENST 450	Wetland Ecology	3	Fa of even years, 2016,2018, etc.	BIOM 301. <i>Course often conflicts with GEOG 373, so plan ahead. GEOG373 is also available Spring, Summer and Winter terms.</i>			

TECHNICAL REQUIREMENTS: 6 credits

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

SYNTHESIS: 6 credits

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

RESTRICTED ELECTIVES: 15 credits – generally 2 courses in one area and 3 courses in the other, but 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	Completed	Notes
AOSC 400	Physical Meteorology of the Atmosphere	3	F	MATH140 <i>or perm.</i>			
AOSC 401	Global Environment	3	Sp	AOSC 400			
BSCI 375	Biological Oceanography	3	varies	BSCI 106 and BSCI 207			
BSCI 473	Marine Ecology	3	Sp	BSCI 106 and BSCI 207			
ENST 200	Fundamentals of Soil Science	4	Fa	CHEM 131/132 recommended.			
ENST314	Fisheries and Sustainability	3	Sp	<i>Offered Sp. of “even” years (2014, 2016...)</i>			
ENST 373	Natural History of the Chesapeake Bay	3	Fa	One semester of biological science			
GEO 453	Ecosystem Restoration	3	Fa	BSCI106, CHEM131/132, MATH140			
GEOG 340 <i>or</i>	Geomorphology	3	TBA	GEOG 201/211.			
GEO 340	Geomorphology	4	Sp	GEO 100/110			
GEOG 472	Advanced Remote Sensing	3	Fa	GEOG 372			
GEOG 473	Advanced Geog. Info. Systems	3	Fa, Sp	GEOG 373			
GEO 452	Watershed and Wetland Hydrology	3	Fa	MATH 140, GEOL 100, CHEM 131/132, <i>or perm</i>			

Area 2 – Management & Graduate School Preparation

Area 2 – Management – must include at least one 300- or 400-level course in Management, below.

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

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

Course	Description	Cr	Offered	Prerequisites	Grade	Completed	Notes
MATH 141	Calculus II	4	F,Sp,Su	MATH 140			
CHEM 231/232	Organic Chemistry	4	F,Sp,Su	CHEM 131/132			
PHYS 161/174	Physics	4	F,Sp	MATH 140			