

SENR
Natural Resource Management
 121 Hours - Summer Semester 2012

COURSE & NUMBER	Units		COURSE & NUMBER	Units	
UNIVERSITY REQUIREMENTS (GE)			SENR REQUIREMENTS		
Writing Skills			SENR CORE REQUIREMENTS		
6 Hours			22 Hours		
English 1110 (First Year English Composition)	3		ENR 1100 (ENR Survey)	1	
ENR 2367 (Communicating Environmental and Natural Resources Information)	3		ENR 2100 (Intro to Environmental Science)	3	
Arts & Humanities			12 Hours		
ENR 2300 (Society and Natural Resources)			ENR 2300 (Society and Natural Resources)	3	
GE Literature Course ●▲	3		ENR 3300 (Intro to Forestry, Fisheries & Wildlife)	3	
GE Arts Course ●▲	3		ENR 3400 (Psychology of Environmental Problems) or ENR 3500 (Community, Environment & Development)	3	
GE History Course ●▲	3		ENR 3200 (Natural Resources Policy)	3	
GE Culture & Ideas or other Humanities course ●▲ [Recommended: ENR 3470 (Religion & Environmental Values in America)]	3		ENR 3700 (Intro to Spatial Info for Natural Resources) *	3	
Social Sciences			6 Hours		
ENR 4900.02 (Senior Capstone) (Natural Resources Mgmt)			ENR 4900.02 (Senior Capstone) (Natural Resources Mgmt)	3	
RURLSOC 1500 ● (Recommended) or GE Social Science ●▲	3		NRM MAJOR CORE REQUIREMENTS		
AED Econ 2001 or Economics 2001.01 (Microeconomics)	3		14 Hours		
Diversity Courses			overlapping		
ENR 3600 (Recreation Management on Public Lands)			ENR 3600 (Recreation Management on Public Lands)	3	
Social Diversity in US ●	----		ENR 5642 (Natural Resources Administration & Management)	3	
Global Studies Course 1 ▲	----		English 3305 (Technical Writing)	3	
Global Studies Course 2 ▲	----		AEDECON 4310 Environmental & Natural Resource Economics	3	
Data Analysis, Quantitative & Logical Skills			7 Hours		
Experiential learning: Internship: ENR 4191 or Study Abroad: ENR 5797.01-.10				2	
ENR 2000 (Recommended) or STAT 1450 (or approved equivalent)	3		NRM MAJOR SPECIALIZATION REQUIREMENTS (see pages 2-6 for specialization requirements)		
Math 1130 (College Algebra for Business) or Math 1148 (College Algebra)	4		Natural Resources Administration & Management		
Natural Sciences			12 Hours		
Parks and Recreation			29-34 Hours		
Chemistry 1110 (Elementary Chemistry)	5		Sustainable Agriculture		
30 Hours					
Biology 1113 (Energy Transfer & Development) OR Biology 1114 (Form, Function, Diversity and Ecology)	4				
ENR 3000 (Soil Science)	3				
Free Electives*	9-14 Hours		MINIMUM HRS FOR GRADUATION		121 Hours

*ENR 3700 credit hours: If you took ENR 3700 before AU16, you must take an additional hour in *Free Electives*, totaling 10-15 hours, to reach the 121-hour degree minimum.

Natural Resource Administration & Management Specialization	Units	
Required Natural Resource Administration and Management Courses	20	
ENR 3611 Foundations for Environmental Communications, Education and Interpretation	2	
ENR 4400 Law and Legal Process or AEDECON 3170 Agribusiness Law	3	
ENR 5640 Natural Resources Program Planning	3	
Select one of the following: ENR 5649 Wildlife Conservation Policy, ENR 5325 Forest & Public Lands Policy, or additional policy course with advisor approval	3	
Select one of the following: RURLSOC 4500 Community Development in Practice or PUBAFRS 2130 Leadership in the Public and Nonprofit Sectors	3	
ECON 4300 Government Finance in the American Economy	3	
ECON 4310 Local Public Finance or PUBAFRS 4310 State and Local Government Finance	3	
Select 4- 5 additional courses from among the following courses Students may choose broadly across the areas listed below or take all courses within one particular focus area	12	
Forestry		
ENR 3321 Biology and Identification of Woody Forest Plants	3	
ENR 3322 Forest Ecosystems	3	
ENR 3323 Forest Biometrics	3	
ENR 3333 Silviculture	3	
<i>Other course may be added with faculty advisor approval</i>		
Fisheries		
ENR 4342 Freshwater Fisheries Management	3	
ENR 5350.01 Taxonomy and Behavior of Aquatic Invertebrates or ENR 5350.02 Taxonomy and Behavior of Fishes	3	
ENR 4345 Methods in Aquatic Ecology	4	
ENR 5280 Stream Ecology	4	
EEOB 5420 Ecology of Inland Waters (prereq EEOB 3410)	4	
EEOB 5430 Fish Ecology (prereq EEOB 3410)	3	
<i>Other course may be added with faculty advisor approval</i>		
Wildlife		
ENR 5360 Principles of Wildlife Ecology and Management	3	
ENR 5364.01 Mammalian Wildlife Biology & Management or 5364.02 Avian Wildlife Biology & Management	3	
ENR 5370 Management of Wildlife Habitat	3	
ENR 5362 Wildlife Ecology Methods	3	
<i>Other course may be added with faculty advisor approval</i>		
Soil and Water		
ENR 3280 Water Quality Management	2	
ENR 4260 Soil Resource Management	3	

ENR 5260 Soil Landscapes: Morphology, Genesis, and Classification	3	
ENR 5279 Urban Soils and Ecosystem Services: Assessment and Restoration or ENR 5273 Environmental Fate and Impact of Contaminants in Soil and Water	3	
<i>Other course may be added with faculty advisor approval</i>		
Sustainable Agriculture		
ENR 5600 Sustainable Agriculture and Food Systems	3	
HCS 2306 Sustainable Vegetable Production Practicum: Planning, Growing, and Marketing	3	
RURLSOC 5530 Sociology of Agriculture and Food Systems	3	
ENR 4260 Soil Resource Management	3	
<i>Other course may be added with faculty advisor approval</i>		
Visitor Services		
ENR 4611 Environmental Interpretation and Visitor Services	3	
ENR 4610 Natural History of Ohio	3	
ENR 4648 Environment and Natural Resources Law Enforcement	3	
CONSCI 3930 Consumer Decision Making	3	
BUSML 3150 Foundations of Marketing	3	
<i>Other course may be added with faculty advisor approval</i>		
Zoo Science and Management		
ENR 4611 Environmental Interpretation and Visitor Services	3	
ENR 4610 Natural History of Ohio	3	
ENR 4360 Zoo Science and Management	2	
EEOB 3310 Evolution	4	
EEOB 3320 Organismal Diversity	3	
<i>Other course may be added with faculty advisor approval</i>		
University GE Total/SENR Core Total	78	
Natural Resources Administration and Management Specialization Total	33	
Free Electives	10	
Degree Total	121	

Parks & Recreation Specialization	Units	
Required Parks and Recreation Courses	10-11	
ENR 3611 Foundations for Environmental Communications, Education and Interpretation	2	
ENR 4400 Law and Legal Process or AEDECON 3170 Agribusiness Law	3	
ENR 5640 Natural Resources Program Planning	3	
BUSMHR 3100 Foundations of Management and Human Resources or AEDECON 3160 Human Resource Management in Small Businesses (2) or BUSML 3150 Foundations of Marketing	2-3	
Select 2 of the following courses (cannot be double counted with sub-specialization)	4-6	
ENR 3335.01 Introduction to Wildland Fire Management	2	
ENR 4611 Environmental Interpretation and Visitor Services	3	
ENR 4360 Zoo Science and Management	2	
ENR 4648 Environment and Natural Resources Law Enforcement	3	
RURLSOC 4500 Community Development in Practice	3	
ECON 4300 Government Finance in the American Economy	3	
ECON 4310 Local Public Finance or PUBAFRS 4310 State and Local Government Finance	3	
Complete one of the following sub-specialization areas Student will complete 5 additional courses in one of the following sub-specialization areas. Additional courses may be substituted with advisor approval.	14-16	
Forestry		
ENR 3321 Biology and Identification of Woody Forest Plants	3	
ENR 3322 Forest Ecosystems	3	
ENR 3323 Forest Biometrics	3	
ENR 3333 Silviculture	3	
ENR 5325 Forest & Public Lands Policy or additional policy course with advisor approval	3	
<i>Other course may be added with faculty advisor approval</i>		
Fisheries		
ENR 4342 Freshwater Fisheries Management	3	
ENR 5350.02 Taxonomy and Behavior of Fishes, or ENR 5350.01 Taxonomy and Behavior of Aquatic Invertebrates	3	
ENR 4345 Methods in Aquatic Ecology	4	
ENR 5280 Stream Ecology	4	
EEOB 5420 Ecology of Inland Waters (prereq: EEOB 3410)	4	
EEOB 5430 Fish Ecology (prereq: EEOB 3410)	3	
Select one of the following: ENR 5649 Wildlife Conservation Policy, ENR 5325 Forest & Public Lands Policy, or additional policy course with advisor approval	3	
<i>Other course may be added with faculty advisor approval</i>		
Wildlife		
ENR 5360 Principles of Wildlife Ecology and Management	3	
ENR 5364.01 Mammalian Wildlife Biology and Management or 5364.02 Avian Wildlife Biology and Management	3	
ENR 5370 Management of Wildlife Habitat	3	

ENR 5362 Wildlife Ecology Methods	3	
ENR 5649 Wildlife Conservation Policy or additional policy course with advisor approval	3	
<i>Other course may be added with faculty advisor approval</i>		
Soil and Water		
ENR 3280 Water Quality Management	2	
ENR 4260 Soil Resource Management	3	
ENR 5260 Soil Landscapes: Morphology, Genesis, and Classification	3	
ENR 5279 Urban Soils and Ecosystem Services: Assessment and Restoration or ENR 5273 Environmental Fate and Impact of Contaminants in Soil and Water	3	
Select one of the following: ENR 5649 Wildlife Conservation Policy, ENR 5325 Forest & Public Lands Policy, or additional policy course with advisor approval	3	
<i>Other course may be added with faculty advisor approval</i>		
Visitor Services		
ENR 4611 Environmental Interpretation and Visitor Services	3	
ENR 4610 Natural History of Ohio	3	
ENR 4648 Environment and Natural Resources Law Enforcement	3	
CONSCI 3930 Consumer Decision Making	3	
BUSML 3150 Foundations of Marketing	3	
Select one of the following: ENR 5649 Wildlife Conservation Policy, ENR 5325 Forest & Public Lands Policy, or additional policy course with advisor approval	3	
<i>Other course may be added with faculty advisor approval</i>		
Zoo Science and Management		
ENR 4611 Environmental Interpretation and Visitor Services	3	
ENR 4610 Natural History of Ohio	3	
ENR 4360 Zoo Science and Management	2	
ENR 5649 Wildlife Conservation Policy or additional policy course with advisor approval	3	
EEOB 3310 Evolution	4	
EEOB 3320 Organismal Diversity	3	
<i>Other course may be added with faculty advisor approval</i>		
University GE Total/SENR Core Total	78	
Parks & Recreation Specialization Total	29-34	
Free Electives	9-14	
Degree Total	121	

Sustainable Agriculture Specialization	Units	
Required Sustainable Agriculture Courses	12	
Capstone Course: ENR 5600 Sustainable Agriculture and Food Systems	3	
Environmental/Production Dimension Courses		
ENR 4260 Soil Resource Management	3	
HCS 2306 Sustainable Vegetable Production Practicum: Planning, Growing & Marketing	3	
Required Social Dimension Courses: RURLSOC 5530 Sociology of Agriculture and Food Systems	3	
Economic Dimension Course: AEDECON 4310 Environmental & Nat Res Economics (covered in NRM Required Core)	0	
Select 18 additional units from with at least 3 units from the Environmental/Production Dimension, 3 units from the Social/Policy Dimension and 3 units from the Economic/Business Dimension. Students may choose broadly or develop a more focused specialization within sustainable agriculture (i.e. focus on soils, focus on farm production, focus on farm management, or focus on planning for local food systems. Consult with the advisor for further guidance in developing a sub-specialization if desired.	18	
Environment/Production Dimension Courses		
ENR 2155 Energy and Environment	3	
ENR 5279 Urban Soils and Ecosystem Services: Assessment and Restoration	3	
ENR 5270 Soil Fertility	3	
ENR 5260 Soil Landscapes: Morphology, Genesis, and Classification	3	
ENR 5262 Environmental Soil Chemistry and Remediation	3	
ENR 5273 Environmental Fate and Impact of Contaminants in Soil and Water	3	
HCS 5450 Vegetable Crop Production & Physiology	3	
HCS 2200 Science of Sustainable Plant Production	3	
HCS 2201 Ecology of Managed Plant Systems	4	
HCS 2203 People & Plants: Meals, Medicine, Material, & Myth	3	
HCS 2305 Organic Gardening	1	
FABE 2720 Principles of Soil and Water Engineering	2	
FABE 5550 Sustainable Waste Management	3	
FABE 5320 Agroecosystems	3	
PLNTPTH 5140 Diseases of Field Crops	2	
PLNTPTH 3001 General Plant Pathology Lecture	3	
ENTOMOL 4601 General Insect Pest Management	2	
ENTOMOL 4603 Agricultural Entomology	2	
<i>Other Environment/Production Dimension courses with faculty advisor approval</i>		
Social/Policy Dimension Courses		
RURLSOC 5500 Diffusion of Innovations	3	
ENR 7520 Environmental Science and Law (GRAD – permission only)	3	

AEDECON 4597.01 Food, Population, and the Environment	3	
AEDECON 4532 Food Security and Globalization	3	
<i>Other Social/Policy Dimension courses with faculty advisor approval</i>		
Economics/Business Dimension Courses		
AEDECON 5330 Benefit-Cost Analysis	3	
AEDECON 4320 Energy, the Environment, and the Economy	3	
AEDECON 3101 Principles of Agribusiness Management	3	
AEDECON 3102 Principles of Agribusiness Marketing	3	
AEDECON 3103 Principles of Agribusiness Finance	3	
AEDECON 3104 Farm Business Management	3	
AEDECON 3128 Marketing Fruits and Vegetables	2	
<i>Other Economic/Business Dimension courses with faculty advisor approval</i>		
University GE Total/SENR Core Total	78	
Sustainable Agriculture Specialization Total	30	
Free Electives	13	
Degree Total	121	