

Status: PENDING

PROGRAM REQUEST
Natural Resource Management

Last Updated: Pfister, Jill Ann
01/14/2011

Fiscal Unit/Academic Org	Sch of Enviro&Natural Res - D1173
Administering College/Academic Group	Food, Agric & Environ Science
Co-administering College/Academic Group	
Semester Conversion Designation	Re-envisioned with significant changes to program goals and/or curricular requirements (e.g., degree/major name changes, changes in program goals, changes in core requirements, structural changes to tracks/options/courses)
Current Program/Plan Name	Parks, Recreation & Tourism
Proposed Program/Plan Name	Natural Resource Management
Program/Plan Code Abbreviation	PRTADM-BS
Current Degree Title	Bachelor of Science Environment&Natural Resources

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		181	120.7	121	0.3
Required credit hours offered by the unit	Minimum	78	52.0	50	2.0
	Maximum	123	82.0	81	1.0
Required credit hours offered outside of the unit	Minimum	58	38.7	40	1.3
	Maximum	103	68.7	71	2.3
Required prerequisite credit hours not included above	Minimum				
	Maximum	0	0.0	0	0.0

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

- Program Learning Goals**
- Critical thinking/problem solving
 - Application of theoretical concepts
 - Communication (oral, written/graphic)
 - Understanding natural systems
 - Understanding human systems
 - Understanding of coupled systems
 - Demonstrate professional competency

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)

Classroom assignments

- Other classroom assessment methods (e.g., writing assignments, oral presentations, oral exams)

Evaluation of a body of work produced by the student

- Capstone course reports, papers, or presentations

INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)

Surveys and Interviews

- Student survey
- Alumni survey
- Student evaluation of instruction
- Student interviews or focus groups

USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)

- Meet with students directly to discuss their performance
- Analyze and discuss trends with the unit's faculty
- Analyze and report to college/school
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course content
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Program Specialization/Sub-Plan Name	Natural Resource Admin & Mgmt (New)
Program Specialization/Sub-Plan Goals	• see attachment
Program Specialization/Sub-Plan Name	Sustainable Agriculture (New)
Program Specialization/Sub-Plan Goals	• see attachment
Program Specialization/Sub-Plan Name	Parks & Rec Admin & Mgmt (New)
Program Specialization/Sub-Plan Goals	• see attachment

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- PRRMcmmap.pdf: NRM curriculum map
(Curricular Map(s). Owner: Hitzhusen, Gregory Ernest)
- PRRMrationale.doc: NRM program rationale
(Program Rationale Statement. Owner: Hitzhusen, Gregory Ernest)
- NRM_specialization_goals_Nov22.doc: NRM specialization/sub-plan goals
(Other Supporting Documentation. Owner: Hitzhusen, Gregory Ernest)
- SENR_Assessment.doc: SENR prelim. assessment plans
(Other Supporting Documentation. Owner: Hitzhusen, Gregory Ernest)
- SENR_Q2S_Transition_Plans.pdf: SENR transition plans
(Transition Policy. Owner: Hitzhusen, Gregory Ernest)
- SENRcourseNumbers11-25.xls: SENR full semester course list
(List of Semester Courses. Owner: Hitzhusen, Gregory Ernest)
- SENRcoverLetterFinal.pdf: SENR cover letter
(Letter from Program-offering Unit. Owner: Hitzhusen, Gregory Ernest)
- NRM_Sem_AdvFinal.doc: NRM semester advising sheets
(Semester Advising Sheet(s). Owner: Hitzhusen, Gregory Ernest)
- NRM_Major_Q2S_draft_2.4.docx: NRM semester advising overview
(Semester Advising Sheet(s). Owner: Hitzhusen, Gregory Ernest)

Comments

- Program/Plan Code Abbreviation should be corrected to: "NATRESM-BS".

Three-letter codes for specializations are:

PRM=parks and recreation mgmt

NRA=natural resource admin & mgmt

SAG=sustainable ag

This major also has six Areas of Expertise, which are not submitted here as sub-plans, but whose unique requirements are included in the semester advising sheets. (Forestry; Fisheries; Wildlife; Soil and Water; Visitor Services; Zoo Science and Management)

Note that the attached "NRM semester advising overview" duplicates template information included at the beginning of the "NRM semester advising sheets," but in a format more like what will be available to students.

Course list for major is contained in advising sheets; full SENR course list is attached as full spreadsheet of courses.

(by Hitzhusen, Gregory Ernest on 12/12/2010 04:14 PM)

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Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Hitzhusen, Gregory Ernest	11/27/2010 12:06 AM	Submitted for Approval
Revision Requested	Hitzhusen, Gregory Ernest	12/10/2010 02:48 PM	Unit Approval
Submitted	Hitzhusen, Gregory Ernest	12/12/2010 04:14 PM	Submitted for Approval
Approved	Hitzhusen, Gregory Ernest	12/12/2010 04:15 PM	Unit Approval
Revision Requested	Pfister, Jill Ann	12/20/2010 12:47 PM	SubCollege Approval
Submitted	Hitzhusen, Gregory Ernest	12/20/2010 12:59 PM	Submitted for Approval
Approved	Hitzhusen, Gregory Ernest	12/20/2010 12:59 PM	Unit Approval
Revision Requested	Pfister, Jill Ann	01/13/2011 12:05 PM	SubCollege Approval
Submitted	Hitzhusen, Gregory Ernest	01/13/2011 02:03 PM	Submitted for Approval
Approved	Hitzhusen, Gregory Ernest	01/13/2011 02:04 PM	Unit Approval
Approved	Pfister, Jill Ann	01/14/2011 05:14 PM	SubCollege Approval
Approved	Pfister, Jill Ann	01/14/2011 05:15 PM	College Approval
Pending Approval	Soave, Melissa A	01/14/2011 05:15 PM	CAA Approval



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To: The Office of Academic Affairs

From: Ron Hendrick, Professor and Director

Date: November 23, 2010

Re: School of Environment and Natural Resources Semester Program Proposals

The faculty and staff of the School of Environment and Natural Resources (SENR) have completed a thorough review and revision of our undergraduate and graduate curricula in preparation for the conversion to semesters, and the SENR faculty has voted to recommend that the Office of Academic Affairs approve the attached semester curriculum proposals. In addition to the work of several curricular sub-committees within the School, the SENR Academic Affairs Committee reviewed and approved all semester conversion plans for undergraduate programs, and the SENR Graduate Studies Committee reviewed and approved plans for the MS, PhD, and MENR graduate programs. SENR faculty approved these semester plans by unanimous vote (25 in favor, 0 opposed, 0 abstentions) on April 16, 2010; subsequent minor revisions and updates to the plans have been approved by SENR curriculum committees as appropriate.

The following outline details the SENR programs proposed for semester: A) conversion, B) new approval, C) deactivation, and D) termination.

A. Existing SENR programs to be converted to semesters include:

(Note: Rural Sociology programs included below became part of SENR in 2010; program degree codes are in parentheses following program titles; specialization three-letter codes are in parentheses following specializations.)

Four Undergraduate Majors:

- 1) Environmental Science (ENVSCI-BS): *modified from four to five specializations representing existing focal areas in the major, including Ecosystem Restoration (ECR), Water Science (WTR), Environmental Molecular Science (EMS), Soil Resources and Environmental Sustainability (SOI), and Environmental Science Education (ESE).*
- 2) Forestry, Fisheries, and Wildlife (FFW-BS): *converted as **semester equivalent**, with appropriate revisions to maintain certification and double-certification options uniquely available (compared with other programs nationally) to students in this major, including Society of American Foresters (SAF) accreditation and The Wildlife Society (TWS) and American Fisheries Society (AFS) certifications. Three-letter specialization codes for FFW specializations (FAS, FOR, FWM, UFW, WFS, WPV, WLS) are detailed in the comment field of the FFW-BS program request.*
- 3) Environmental Policy and Decision Making (ENVPDM-BS): *modified in title (previously Environmental Policy and Management (EPM)) and designating three specializations based on existing focal areas in the major: Climate Change (CCP), International Issues (IIP), and Water Conservation (WCP).*
- 4) Natural Resource Management (NATRESM-BS): *modified in title (previously Parks, Recreation & Tourism (PRT)) and designating three specializations based on existing and emerging focal areas (made possible by the addition of Rural Sociology faculty to SENR in 2010) in the major: Parks and Recreation Management (PRM), Natural Resource Administration and Management (NRA), and Sustainable Agriculture (SAG), with additional focus-area options (non-transcript) aligned with employment opportunities and existing programs in the School: Forestry, Fisheries, Wildlife, Soil and Water, Visitor Services, and Zoo Science and Management.*

Two Undergraduate Minors:

- 1) Soil Resources (SOILSCI-MN): *converted as **semester equivalent**.*
- 2) Rural Sociology (RURLSOC-MN): *converted as **semester equivalent**.*

Two Graduate Degree Programs:

- 1) Master of Science (ENVNATR-MS): converted as **semester equivalent**
- 2) Doctor of Philosophy (ENVNATR-PH): converted as **semester equivalent**

The Environment and Natural Resources Graduate Program awards both MS and PhD degrees in seven areas of specialty (all converted as **semester equivalents**):

- Ecological Restoration (ERS)
- Ecosystem Science (ECS)
- Environmental Social Sciences (ESS)
- Rural Sociology (RS)
- Fisheries and Wildlife Science (FWS)
- Forest Science (FS)
- Soil Science (SSC)

Three Graduate Minors (all converted as **semester equivalents**):

- 1) Environment and Natural Resources (ENVNATR-GM)
- 2) Soil Science (SOILSCI-GM)
- 3) Rural Sociology (RURLSOC-GM)

One Professional Degree Program (converted as **semester equivalent**):

- 1) Master of Environment and Natural Resources (ENVNAT-MEN)

Three Combined Programs (all combined programs will be converted as **semester equivalents**, and impose no additional requirements or provisions beyond the requirements of the combined degrees. As such, and abiding all college and university rules of the degree-granting partners, forms for **these combined degrees are not included in these SENR semester electronic program proposals**):

- 1) Combined BS/MS
- 2) Combined BS/MENR
- 3) Dual Degree Program with the John Glenn School of Public Affairs: MS/MAPPM (Master of Arts in Public Policy and Management) or MS/MPA (Master of Public Administration)

B. New SENR semester programs proposed for approval by OAA:

Four undergraduate minors have been developed for semesters. Three minors correspond with existing majors in the School; these three minors collectively replace the Natural Resources Management minor. The fourth minor, Sustainable Agriculture, has been developed through the collaboration of Rural Sociology and Soils faculty, together with colleagues from across the College of Food, Agricultural and Environmental Sciences.

Undergraduate Minors:

- 1) Environmental Science (ENVSCI-MN)
- 2) Forestry, Fisheries & Wildlife (FFW-MN)
- 3) Society and Environmental Issues (SOCENV-MN)
- 4) Sustainable Agriculture (SUSTAGR-MN)

C. SENR programs to be deactivated:

Each listed below is an old program name that has been replaced by current programs listed above, either through revised titles (1-3), or being subsumed as a specialization into the ENR MS and PhD (4-9). With the exception of Rural Sociology, which joined SENR in 2010, each of these changes were effected three or more years ago.

- 1) Fisheries and Wildlife Management (FWMGT-BS)
- 2) Forestry and Urban Forestry (FORUF-BS)
- 3) Human Dimensions in Natural Resources (HDNR-BS)
- 4) Natural Resources (NATRES-PH)
- 5) Natural Resources (NATRES-MS)
- 6) Rural Sociology (RURLSOC-MS)
- 7) Rural Sociology (RURLSOC-PH)

- 8) Soil Science (SOILSCI-PH)
- 9) Soil Science (SOILSCI-MS)

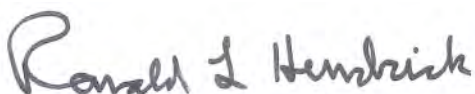
D. SENR programs to be terminated:

1) Natural Resources Management Minor (NATRESM-MN): this minor is being terminated because of its broad scope and is being replaced by the more specific new minors listed above that correspond to existing majors.

SENR faculty and staff have worked tirelessly to develop these plans, engaging in a thorough and collegial process. Two faculty retreats devoted significant time to semester conversion plans, and all faculty meetings beginning in the fall of 2009 included updates and discussion about semester conversion planning. Dr. Greg Hitzhusen was appointed by the School as a point person to facilitate Q2S planning, participated in regular UCAT Q2S workshops with colleagues from across the university, and established a Carmen site to share and organize Q2S working documents and resources. In addition to the committees mentioned above, several new committees led the curriculum development process, including four faculty working groups formed within each of the majors, and a core curriculum committee of a dozen faculty representing all of the specializations across the four undergraduate majors and including myself and the chairs of the Grad Studies Committee and Academic Affairs Committee. These groups reviewed all recent SENR curriculum revisions, researched semester programs of peer institutions, and generated creative proposals of how to improve and better integrate our multi-disciplinary curriculum. Curriculum mapping revealed gaps and overlap in our curriculum; to match our semester courses to our learning goals, at least nine new courses have been proposed, several others have been merged, and at least 75 courses will be discontinued. As a previous director of a Natural Resources program that underwent semester conversion at the University of Georgia, I provided guidance to revise SENR's curricular offerings around our core strengths, guided by learning outcome goals and encouraging options beyond existing structures and traditions. Several SENR faculty and staff participated in the College of Food, Agricultural, and Environmental Sciences bi-weekly Q2S Implementation Committee meetings starting in November 2009, sharing planning ideas with Q2S point people from across the College.

We also based our semester curriculum development on several faculty-led research efforts. Our social science faculty created a survey of environmental curriculum interests and career goals for CFAES, SENR and OSU undergraduate student samples, and results from over 1300 respondents (published results now *in press*) informed our vision of student interests, needs, and knowledge about the environmental topics addressed in SENR programs. We also completed phone interviews with SENR alumni and stakeholders to examine curricular elements most valuable to graduates and employers. And I conducted exit interviews of SENR students to better understand their experience in SENR programs. These measures and the efforts mentioned above collectively led the faculty to propose an expanded core of courses to help SENR students better integrate natural and social science elements of the curriculum, and to modify the majors as described above. The core curriculum committee will remain intact to monitor the quality and success of the semester curriculum, and make revisions as appropriate into the future.

This proposed curriculum represents welcome changes that increase the efficiency and complementarity of SENR programs, maximizing the expertise of our faculty and improving opportunities for SENR students to prepare for graduate education and succeed in their professional careers. I have also attached a commentary detailing SENR's preliminary assessment plans for semester programs. These program proposals reflect the outstanding collaborative efforts of SENR faculty to prepare for the semester transition. I heartily recommend approval of these plans, and appreciate OAA's ongoing efforts to strengthen our curriculum in OSU's transition to semesters.



Ronald L. Hendrick, Ph.D.
Director, SENR

10. PRRM rationale for changes:

The proposed changes are designed to update the current major to address current trends within recreation and natural resource management. The current major includes substantial flexibility for students through the development of a 28-quarter hour specialization in consultation with their academic advisor. The new proposed structure creates a more formal list of courses and provides additional structure for students to develop a specialization and additional area of expertise. This proposed structure has been developed through researching comparable programs nationwide, discussions with current students and program alumni, and potential future employers and reflects their input as to the coursework required to provide the necessary theoretical understanding and practical experience to be successful in their future careers.

Unit	Qtr # plus suffix	Semester #	Sem units	1c: Course Title Long	rank	
ENR	100	1000.01, .02, .03	1	Environment and Natural Resources Survey	freshman, sophomore, junior, senior	
ENR	100T	1000T	1	Environment and Natural Resources Survey	transfers	
ENR	100H	1000H	1	Environment and Natural Resources Survey	honors freshman	
ENR	101	1010	4	Soils in Our Environment (Planet Earth - The Fragile Skin)	freshman, sophomore	
RURLSOC	105	1500	3	Introduction to Rural Sociology	Freshman, Sophomore, Junior, Senior	
ENR	119.01	1001.01	1	Survey of Park and Policy Careers	freshman, sophomore, junior, senior	119 is merged w 100 as 1000
ENR	119.02	1001.02	1	Professional Survey of Forestry, Fisheries and Wildlife	freshman, sophomore	119 is merged w 100 as 1000
ENR	119.03	1001.03	1	Professional Survey of Environmental Science	freshman, sophomore, junior, senior	119 is merged w 100 as 1000

ENR	155	2155	4	Energy and Environment	freshman, sophomore, junior, senior
ENR	201	2100	3	Introduction to Environmental Science	freshmen, sophomores, juniors, seniors
ENR	203	2300	3	Society and Natural Resources	Freshmen, Sophomores
ENR	221	3321	3	Biology and Identification of Woody Forest Plants	freshman, sophomore, junior, senior
ENR	222	2000	3	Natural Resources Data Analysis	Sophmores
ENR	230	2360	3	Ecology and Conservation of Birds	Freshman, Sophomore, Junior and Senior
ENR	232	2320	3	Landscape Maintenance	Freshman, Sophomore, Junior, Senior
ENR	289	2191	1 or 2	Natural Resources Practicum	sophomore, junior, senior
ENR	300.01	3000	3	Soil Science	sophomore, junior, senior

ENR	300.02	3001	1	Soil Science Laboratory	sophomore, junior, senior
ENR	3XX	3400	3	Psychology of Environmental Problems	Freshman, Sophomore, Junior
ENR	311	3611	2	Foundations for Environmental Communications, Education and Interpretation	Soph,Junior,Se nior
ENR	319	3300	3	Introduction to Forestry Fisheries and Wildlife	freshman, sophomore, junior, senior
ENR	322	3322	3	Forest Ecosystems	freshman, sophomore, junior, senior
ENR	323	3323	3	Forest Biometrics	sophomore
ENR	324.01	3750	3	Natural Resources Photointerpretation- Applied Remote Sensing for Natural Resources.	junior, senior
ENR	324.02	3700	2	Introduction to Spatial Information for Natural Resources	sophomore, junior, senior
ENR	333	3333	3	Silviculture	freshman, sophomore, junior, senior

ENR	340	3600	2	Management of Public Lands	sophomore, junior	
ENR	347	3470	3	Religion and Environmental Values in America (proposed course)	sophomore, junior	
ENR	350.01	3335.01	2	Introduction to Wildland Fire Management	freshman, sophomore, junior, senior	
ENR	350.02	3335.02	1	Wildland Fire Management Laboratory	freshman, sophomore, junior, senior	
ENR	355	3280	2	Water Quality Management	sophomore	
ENR	567	2367	3	Communicating Contemporary Environmental and Natural Resources Issues	freshman, sophomore, junior	old 567 converted to new GE 2367
RURLSOC	378	3580	3	Social Groups in Developing Societies	freshman, sophomore, junior, senior	
ENR/RS	3xy	3500	3	Community, Environment and Development	fresman, sophomore, junior, senior	

WS/ENR	3xx	3530	3	Women, Environment and Development	freshman, sophomore, junior, senior
ENR	400	4000	3	Natural Resources Policy	sophomore, junior, senior
ENR	410	4611	3	Environmental Interpretation and Visitor Services	Soph, Junior, Senior
ENR	415	4360	2	Zoo Science and Management	junior, senior
ENR	432	4320	3	Sustainable Forest Products	junior, senior
ENR	442	4260	3	Soil Management	junior, senior
ENR	448	4648	3	Natural Resources Law Enforcement	sophomore, junior, senior
ENR	494	4194	1 to 3	Group Studies	freshman, sophomore, junior, senior, masters, doctoral, professional
ENR	510	4610	3	Natural History of Ohio	freshman, sophomore, junior, senior, graduate

ENR	540	5272	3	Urban and Sports Turf Soils	junior, senior, graduate
RURLSOC	542	4500	3	Leadership and Community Development	Freshman, Sophomore, Junior and Senior
ENR	580	5270	3	Soil Fertility and Fertilizers	Seniors, Masters
ENR	590H	4890H	1	Honors Colloquium	Junior
ENR	597	4597	3	Contemporary Issues in Environment and Natural Resources	junior, senior, masters, doctoral, professional
ENR	601	5210	3	Evaluation of Environmental Impact	junior, senior, masters, doctoral, professional
ENR	602	5211	3	International Environmental Impact Assessment	junior, senior, masters, doctoral, professional
ENR	606.01	4900.01	3	Natural Resources Management	Senior

ENR	606.02	4900.02	3	Natural Resources Management for Forestry Fisheries and Wildlife	junior, senior
ENR	618	5222	3	Ecological Engineering and Ecosystem Restoration	junior, senior, masters, doctoral, professional
ENR	620	5342	3	Principles of Fisheries Ecology and Management	sophomore, junior, senior, masters, doctoral, professional
ENR	622	5280	4	Stream Ecology	sophomore, junior, senior, masters, doctoral, professional
RURLSOC	622	5520	3	Amish Society Principles of Wildlife Ecology and Management	Freshman, Sophomore, Junior, Senior
ENR	623	5360	3	Mammalian Wildlife Biology and Management	ranks 3+
ENR	624A	5364.01	3	Avian Wildlife Biology and Management	junior or senior
ENR	624B	5364.02	3	Avian Wildlife Biology and Management	junior or senior

ENR	625	5370	2	Management of Wildlife Habitat	junior or senior
ENR	626	5345	4	Methods in Aquatic Ecology	sophomore, junior, senior, masters, doctoral, professional
ENR	627	5350.01	3	Taxonomy and Behavior of Aquatic Invertebrates	sophomore, junior, senior, masters, doctoral, professional
ENR	627x	5350.02	3	Taxonomy and Behavior of Fishes	sophomore, junior, senior, masters, doctoral, professional
ENR	628	5355	3	Aquaculture	junior, senior, masters, doctoral
ENR	629	5375	2	Ecology and Management of Wetlands Birds	senior, masters, doctoral, professional
ENR	630	5271	3	Soils of Forest Ecosystems	Juniors, Seniors, Masters

ENR	631	5322	3	Arboriculture	seniors, masters, doctoral, professional
ENR	635	5320	3	Forest Management	seniors, masters, doctoral, professional
ENR	640	5640	4	Natural Resources Program Planning I	junior, senior, masters
ENR	642	5642	3	Natural Resources Administration	Junior, Senior, Masters
ENR	648H	5448H	3	Tragedy of the Commons? Environment, Government and Collective Action	junior, senior, masters, doctoral, professional
ENR	649	5649	3	Wildlife Conservation Policy	junior, senior, masters, doctoral, professional
ENR	650	5260	3	Soil Landscapes: Morphology, Genesis and Classification	junior, senior, masters, doctoral

ENR	651	6451	3	Water Law	senior, masters, doctoral, professional	was Water Resources Institutions and Policies
ENR	655	5261	3	The Soil Physical Environment	senior, masters, doctoral, professional	671 is also absorbed into 5261
ENR	656	5220	2	Ecosystems of the World: Temperate, Boreal and High Latitude Ecosystems	senior, masters, doctoral, professional	
ENR	660	5262	3	Soil Chemical Processes and Environmental Quality	Junior, senior, masters, doctoral, professional	
ENR	662	5362	3	Wildlife Ecology Methods	junior doctoral,mast ers, professional,s	
RURLSOC	662	5500	3	Diffusion of Innovations	enior,junior	
ENR	665	5263	3	Biology of Soil Ecosystems	junior, senior, masters, doctoral	

RURLSOC	666	6500	3	Rural Poverty	doctoral, professional, masters, senior, junior
ENR	675	5273	3	Environmental Fate and Impact of Contaminants in Soil and Water	Junior, senior, masters, doctoral, professional
RURLSOC	678	5570	3	Women in Rural Society	doctoral, masters, professional, junior, senior, sophomore
ENR	683H	4683H	3	Honors Project	junior, senior
RURLSOC	688	5580	3	Social Impact Assessment of Domestic Development	junior, senior, masters, doctoral
ENR	689	4191	3	Professional Practice in Natural Resources	freshman, sophomore, junior, senior
ENR	693	4193	1 to 3	Individual Studies in Environment and Natural Resources	freshman, sophomore, junior, senior

ENR	694	4194	1 to 3	Group Studies	freshman, sophomore, junior, senior, masters, doctoral, professional
ENR	697	5797	1 to 15	Long-term Study Abroad	junior, senior, masters, doctoral, professional
ENR	7XX	7400	2	Communicating Environmental Risk	Masters, Doctoral, Professional
ENR	720	5265	2	Characterization of Soil in the Field and Laboratory: Sampling	junior, senior, masters, doctoral, professional
ENR	725.01	5250.01	3	Wetland Ecology and Restoration	senior, masters, doctoral, professional
ENR	725.02	5250.02	1	Wetland Field Laboratory	senior, masters, doctoral, professional

was Study at
a Foreign
Institution

ENR	730	5274	2	Computer Simulation of Soil Hydrological and Biogeochemical Processes	junior, senior, masters, doctoral, professional
ENR	731	7310	2	Principles and Applications of Forest Ecosystem Restoration	Masters, doctoral
ENR	733	7333	3	Successional Dynamics of Forests	masters, doctoral
RURLSOC	733	5530	3	Sociology of Agriculture and Food Systems	masters, doctoral, professional
ENR	734	5340	3	Forest Ecosystem Management	Senior, masters, doctoral, professional
ENR	736	5325	3	Public Forest and Lands Policy	junior, senior, masters, doctoral, professional
ENR	738	7380	3	Climate and Society	Masters, Doctoral, some seniors
ENR	740	5266	3	Field Soil Investigation: Soil Chemistry, Fertility and Biology	junior, senior, masters, doctoral, professional

RURLSOC	742	7420	3	Concepts and Theories in Rural Sociology	seniors, masters, doctoral
RURLSOC	744	5540	3	Rural Sociology Demography	junior, senior, masters, doctoral, professional
ENR	750	7500	3	Resolving Social Conflict	masters, doctoral, professional
ENR	752	7520	3	Environmental Science and Law	senior, masters, doctoral, professional
ENR	753	7530	4	Soil Mineralogy	seniors, masters, doctoral
ENR	756	5560	2	Rehabilitation/Restoration of Ecosystems	seniors, masters, doctoral, professional
ENR	760	5225	3	Ecosystem Modeling	junior, senior, masters, doctoral, professional

ENR	761	6610	2	Soil and Environmental Biochemistry	masters, doctoral, professional (junior, senior possible)
RURLSOC	766	7560	3	Environmental Sociology	Masters, doctoral, professional
ENR	770	7700	3	Watershed Ecology and Restoration	masters, doctoral
RURLSOC	788	7542	3	The Change Agent: Sociological Theory Applied to Domestic Development	Masters, Doctoral, Professional
ENR	812	8120	2	Spatial Methods in Natural Resources	masters, doctoral, professional
ENR	815	8150	3	Advanced Environment, Risk and Decision Making	Masters, Doctoral, Professional
ENR	822	8780	3	Quantitative Methods for Natural Resources	masters, doctoral, professional
ENR	835	8350	3	Ecosystem Management Policy	masters, doctoral, professional
ENR	840	8400	2	Theoretical Foundations in the Human Dimensions of Ecosystem Management	masters, doctoral, professional

ENR	851	8510	3	Human Dimensions Theory Building in Natural Resources	masters, doctoral
ENR	871	8710	3	Soils and Climate Change	Masters, Doctoral, Professional
ENR	880	8980	1	Natural Resources Seminar	masters, doctoral, professional
RURLSOC	888	7580	3	Social Action in Community Development	masters, doctoral, professional
RURLSOC	892	8500	3	Rural Sociology of Development and Social Change	masters, doctoral, professional senior,
ENR	894	5240	2	Environmental Molecular Sciences	masters, doctoral
ENR	897	8897	1	Research Proposal Symposium	graduate
ENR	899.01	8890.01	1 to 4	Fish and Wildlife Management Seminar	graduate
ENR	899.02	8890.02	1 to 4	Watershed Ecology and Management Seminar	
ENR	899.03	8890.03	1 to 4	Environmental Science Seminar	graduate
ENR	899.04	8890.04	1 to 4	Soil Science Seminar	graduate
ENR	899.05	8890.05	1 to 4	Forest Science and Management Seminar	graduate

ENR	899.06	8890.06	1 to 4	Environmental Policy and Decision-Making Seminar	graduate
ENR	899.07	8890.07	1 to 4	Environmental Education and Communication Seminar	graduate
ENR	899.08	8890.08	1 to 4	Parks and Recreation Management Seminar	graduate
ENR	985	8785	3	Research Paradigms	masters, doctoral professional
ENR	999	8999	3 to 15	Research	Masters, doctoral

Natural Resource Management

121 Hours - Q2S Curriculum Draft 2.4 – Summer Semester 2012

COURSE & NUMBER	HRS		COURSE & NUMBER	HRS	
UNIVERSITY REQUIREMENTS (GE)			SENR REQUIREMENTS		
<i>Writing Skills</i>	6 Hours		<i>SENR CORE REQUIREMENTS</i>	21 Hours	
English X110 (GE Course 1: Writing Level 1)	3		ENR 1000 (FAES Survey combined with ENR 119)	1	
ENR 2367 (GE Course 2: Writing Level 2)	3		ENR 2100 (Intro to Environmental Science) (GE Open Option 1)	3	
<i>Arts & Humanities</i>	12 Hours		ENR 2300 (Society and Natural Resources) (GE Open Option 2)	3	
GE Literature Course (GE Course 3: Literature) ●★◆	3				
GE Arts Course (GE Course 4: Arts) ●★◆	3				
GE History Course (GE Course 9: Historical Study) ●★◆	3		ENR 3300 (Intro to Forestry, Fisheries & Wildlife)	3	
GE Culture & Ideas or Historical Study (GE Course 12) ●★◆ [Recommended: ENR 347/3400 (Religion & Environmental Values in America)]	3		ENR 3400 (Psychology of Environmental Problems) or ENR 3500 (Community, Environment & Development)	3	
<i>Social Sciences</i>	6 Hours		ENR 4000 (Natural Resources Policy)	3	
Rural Sociology 105/1500 (Recommended) or GE Social Science (GE Course 10: Social Science 1) ●★◆	3		ENR 3700 (Intro to Spatial Info for Natural Resources)	2	
AED Econ 2001 or Economics X200 (Microeconomics) (GE Course 11: Social Science 2)	3		ENR 4900.02 (Natural Resources Mgt)	3	
<i>Diversity Courses</i>	overlapping		<i>NRM MAJOR CORE REQUIREMENTS</i>	14 Hours	
Social Diversity in US ●	---		ENR 340/3600 (Management of Public Lands)	3	
Global Studies Course 1 ★◆	---		ENR 642/5642 (Natural Resources Administration & Management)	3	
Global Studies Course 2 ★◆	---		Experiential learning (e.g. ENR 4191 Internship or ENR 5797 Study Abroad)	2	
<i>Data Analysis, Quantitative & Logical Skills</i>	7 Hours		English x305 (Technical Writing)	3	
ENR 2000 (Recommended) or GE Equivalent Statistics course (GE Course 6: Data Analysis)	3		AED Econ 531/4310 Environmental & Natural Resource Economics	3	
Math 1130 (College Algebra for Business or Math 1148 (College Algebra) (GE Course 5: Math & Logical Skills)	4		<i>NRM MAJOR SPECIALIZATION REQUIREMENTS</i>	30-36 Hours	
<i>Natural Sciences</i>	12 Hours		Parks & Recreation		

COURSE & NUMBER	HRS		COURSE & NUMBER	HRS	
Chemistry XXXX (Chemistry 101/102 equiv)	5		Natural Resources Administration & Management		
Biology XXXX (Biology 113 equiv)	4		Sustainable Agriculture		
ENR 3000 (Intro to Soil Science)	3				
<i>Free Electives</i>	7-13 Hours		MINIMUM HRS FOR GRADUATION	121 Hours	

NRM Template
Draft 11/18/2010

Credit Distribution – overall (note: this “overall” section reformats the attached semester advising overview)

GE	49 (B.S.) Note: our students will take Econ 200 and RS 105/1500 for the two “social science” GE requirements, ENR 2100 and 2300 for the two “open options,” and 3000 as a final Natural Science GE course
SENR Core (common to all 4 majors in the School)	15: 100/119/1000 (1), 319/3300 (3), 3xx/3400 Psych of Env Problems (required for Parks and Recreation Specialization) OR 3xy/3500 Communities (3), 400/4000 (3), 3700-GIS (2), 606/4900.02 (3)
NRM major (core + specialization area)	44-50
NRM Required Core	14
Specialization (Parks and Recreation Management, Natural Resource Administration and Management, or Sustainable Agriculture)	30-36
Free Electives	7-13
TOTAL	121

Credit Distribution – NRM major Required Core. Take all of these courses

ENR 340/3600 Management of Public Lands	3
ENR 642/5642 Natural Resource Administration & Management	3
Experiential learning (e.g., ENR 684/689/4191 Internship or study abroad 3597/5597)	2
English 305 Technical Writing	3
AED Econ 531/4310 Environmental & Natural Resource Economics	3
NRM Required Core total	14

NRM Specialization Areas (Parks and Recreation Management, Natural Resource Administration and Management, or Sustainable Agriculture)

Students will complete coursework in one of the following specialization areas.

Parks & Recreation Specialization Courses

Parks and Recreation Required Courses

ENR 311/3611 Foundations for Environmental Communications, Education and Interpretation	3
ENR 694/##### Law and Legal Process	3
ENR 640/5640 P&R Planning	4
BUSMHR 400 Foundations of Management and Human Resources	3

Select 2 of the following (courses cannot be double counted with sub-specialization requirements):

ENR 350/3335.01&.02 Wildland Fire Management	3
ENR 410/4611 Env Interp and Visitor Services	3
ENR 415/4360 Zoo Science and Management	3
ENR 448/4648 Law Enforcement	3
ENR 7400 Risk Communication	3
RS/ENR 542/4500 Leadership and Community Development	3
ECON 530 Government Finance in the American Economy	3
PUBPOL 531 State and Local Government Finance	3

Complete one of the following sub-specialization areas

Select will complete 5 additional courses in one of the following sub-specialization areas. Additional courses may be substituted with advisor approval.

Forestry

ENR 221/3321 Biology and ID of Woody Plants	3
ENR 322/3322 Forest Ecosystems	3
ENR 323/3323 Forest Biometry	3
ENR 333/3333 Silviculture	3
ENR 736/5325 Public Forest & Lands Policy or additional policy course with advisor approval	3

Fisheries

ENR 620/5342 Principles of Fisheries Ecology and Management	3
ENR XXX/5350.02 Taxonomy and Behavior of Fishes, or ENR 627/5350.01 Taxonomy and Behavior of Aquatic Invertebrates	3
ENR 626/5345 Methods in Aquatic Ecology	4
ENR 622/5280 Stream Ecology, or EEOB 655/652 Limnology	4
Select one of the following: ENR 649/5649 Wildlife Conservation Policy, ENR 736/5325 Public Forest & Lands Policy, or additional policy course with advisor approval	3

Wildlife

ENR 623/5360 Principles of Wildlife Ecology and Management	3
ENR 624A/5364.01 Mammalian Ecology, Biology, and Management or 624B/5364.02 Avian Ecology, Biology, and Management	3
ENR 625/5370 Management of Wildlife Habitat	3

ENR 662/5362 Wildlife Ecology Methods	3
ENR 649/5649 Wildlife Conservation Policy or additional policy course with advisor approval	3
Soil and Water	
ENR 355/3280 Water Quality Management	3
ENR 442/4260 Soil Management	3
ENR 650/5260 Soil Landscapes: Morphology, Genesis, and Classification	3
ENR 5279 Urban Soils and Ecosystem Services: Assessment and Restoration or ENR 675/5273 Environmental Fate and Impact of Contaminants in Soils and Waters	3
Select one of the following: ENR 649/5649 Wildlife Conservation Policy, ENR 736/5325 Public Forest & Lands Policy, or additional policy course with advisor approval	3
Visitor Services	
ENR 410/4611 Env Interp and Visitor Services	3
CONSCI 230 Introduction to Hospitality Management	3
CONSCI 543 Consumer Decision Making	3
BUSML 450 Foundations of Marketing Management	3
Select one of the following: ENR 649/5649 Wildlife Conservation Policy, ENR 736/5325 Public Forest & Lands Policy, or additional policy course with advisor approval	3
Zoo Science and Management -Mark is looking into feasibility to offer this; potential courses listed below	
ENR 410/4611 Env Interp and Visitor Services	3
ENR 415/4360 Zoo Science and Management	3
ENR 649/5649 Wildlife Conservation Policy or additional policy course with advisor approval	3
EEOB 400 Evolution	3
EEOB 405 Diversity and Systematics of Organisms	3
Parks and Recreation Specialization Total	34 (36 if complete Fisheries subspecialization)
Additional free electives required to complete major	2 (0 if complete Fisheries subspecialization)

Natural Resource Administration and Management Specialization Courses

Natural Resource Administration and Management Required Courses

ENR 311/3611 Foundations for Environmental Communications, Education and Interpretation	3
ENR 694/ Law and Legal Process	3
ENR 640/5640 P&R Planning	4
Select one of the following: ENR 649/5649 Wildlife Conservation Policy, ENR 736/5325 Public Forest & Lands Policy, or additional policy course with advisor approval	3
Select one of the following: RS 542 Leadership and Community Development or PUBPOLM 290 Leadership in the Public and Nonprofit Sectors	3
ECON 530 Government Finance in the American Economy	3
PUBPOL 531 State and Local Government Finance	3

Select 4 additional courses (12 credits) from among the following courses

Students may choose broadly across the areas listed below or take all courses within one particular focus area

Forestry

ENR 221/3321 Biology and ID of Woody Plants	3
ENR 322/3322 Forest Ecosystems	3
ENR 323/3323 Forest Biometry	3
ENR 333/3333 Silviculture	3

Fisheries

ENR 620/5342 Principles of Fisheries Ecology and Management	3
ENR XXX/5350.02 Taxonomy and Behavior of Fishes or ENR 627/5350.01 Taxonomy and Behavior of Aquatic Invertebrates	3
ENR 626/5345 Methods in Aquatic Ecology	4
ENR 622/5280 Stream Ecology or EEOB 655/652 Limnology	4

Wildlife

ENR 623/5360 Principles of Wildlife Ecology and Management	3
ENR 624A/5364.01 Mammalian Ecology, Biology, and Management or 624B/5364.02 Avian Ecology, Biology, and Management	3
ENR 625/5370 Management of Wildlife Habitat	3
ENR 662/5362 Wildlife Ecology Methods	3

Soil and Water

ENR 355/3280 Water Quality Management	3
ENR 442/4260 Soil Management	3
ENR 650/5260 Soil Landscapes: Morphology, Genesis, and Classification	3
ENR 5279 Urban Soils and Ecosystem Services: Assessment and Restoration or ENR 675/5273 Environmental Fate and Impact of Contaminants in Soils and Waters	3

Visitor Services

ENR 410/4611 Env Interp and Visitor Services	3
CONSCI 230 Introduction to Hospitality Management	3
CONSCI 543 Consumer Decision Making	3
BUSML 450 Foundations of Marketing Management	3
Zoo Science and Management -Mark is looking into feasibility to offer this; potential courses listed below	
ENR 410/4611 Env Interp and Visitor Services	3
ENR 415/4360 Zoo Science and Management	3
EEOB 400 Evolution	3
EEOB 405 Diversity and Systematics of Organisms	3
Natural Resource Administration and Management Specialization Total	34
Additional free electives required to complete major	2

Sustainable Agriculture

Sustainable Agriculture Required Courses

Capstone Course

ENR 5600 Sustainable Agriculture and Food Systems 3

Environmental/Production Dimension

ENR 442/4260 Soil Management 3

HCS 2306 Sustainable Vegetable Production 3

Social Dimension

ENR/RS 733/5530 Sociology of Agriculture & Food Systems 3

Economic Dimension

AEDE 531 Environmental & Natural Resource Economics (covered in NRM
Required Core)

Select an additional 18 credits from the following list, with at least 3 credits from the Environmental/Production Dimension, 3 credits from the Social/Policy Dimension and 3 credits from the Economic/Business Dimension. Students may choose broadly or develop a more focused specialization within sustainable agriculture, such as a focus on soils, a focus on farm production, a focus on farm management, or a focus on planning for local food systems. Consult with the advisor for further guidance in developing a subspecialization if desired.

Environment/Production Oriented Courses

ENR 155/2155: Energy and the Environment 4

ENR 5279: Urban Soils and Ecosystem Services 3

ENR 580/5270: Soil Fertility and Fertilizers 3

ENR 650/5260: Soil Landscapes: Morphology, Genesis, and Classification 3

ENR 660/5262: Soil Chemical Processes and Environmental Quality 3

ENR 675/5273: Environmental Fate/Impact of Contaminants in Soils and
Water 3

ES 425/4425: Energy Resources and Sustainability 3

HCS 5450: Vegetable Production 3

HCS 2200: Science of Sustainable Plant Production 3

HCS 2201: Ecology of Managed Plant Systems 3

HCS 2203: Human & Cultivated Plant Interactions 3

HCS 2305: Organic Gardening 3

FABE 2720: Soil and Water Engineering 3

FABE 5350: Sustainable Waste Management 3

FABE 732/5320: Agroecosystems 3

Plant Pathology 614/5140: Fruit and Vegetable Crop Diseases 3

Plant Pathology 401/3001: General Plant Pathology 3

ENT 460/403: Agricultural Entomology and Insect Pest Management 3

Other environment/production courses may be allowed in consultation
w/ advisor

Social/Policy Dimensions

ENR/RS 662/5500: Diffusion of Innovation 3

ENR 752/7520: Environmental Science and Law 3

AEDE 597.01: World Population, Food and Environment 3

AEDE 532: Food Security and Globalization 3

Other Social/Policy courses may be allowed in consultation w/ advisor

Economics/Business Dimension

AEDE 631: Benefit-Cost Analysis	3
AEDE 565: Global Climate Change: Economic Implications and Opportunities	3
AEDE 401: Principals of Agribusiness Management	3
AEDE 402: Principals of Agribusiness Marketing	3
AEDE 403: Principals of Agribusiness Finance	3
AEDE 410: Farm Business Management	3
AEDE 428: Marketing Fruits and Vegetables	3
Other Economic/Business dimension courses may be allowed in consultation w/ advisor	
Sustainable Agriculture Specialization Total	30
Additional free electives required to complete major	6

SENR Q2S Transition Plans

SENR's transition plans, including the OSU Pledge to Students, are posted on the SENR website at:

[http://senr.osu.edu/Current Students/SENR Quarter to Semester Conversion.htm#](http://senr.osu.edu/Current_Students/SENR_Quarter_to_Semester_Conversion.htm#)

The links listed there are printed below.

Additional transition resources will be posted at this link shortly, including sample four-year plans for students who will graduate with three years in quarters and one year in semesters (3-1), two years in each (2-2), and one year in quarters and three in semesters (1-3). Sample 2-1, 2-2, and 1-3 plans will be posted for each SENR undergraduate major.

School Of Environmental & Natural Resources

<http://senr.osu.edu/secondaryprint.asp?id=65c=2145&info=&pageid=2336>



SENR and the Quarter-to-Semester Conversion

Why is this happening?

The conversion is the result of a directive from the Ohio Board of Regents and affects twenty 2 and 4 year Ohio colleges and universities that are currently on the quarter system, including: Ohio University, University of Cincinnati, Wright State University, Columbus State Community College, Sinclair Community College, Otterbein College, Clark State Community College, and others. The reasons are many but the main benefits to students are:

- The chance to be more competitive for internships and permanent positions because of an earlier end to the academic year.
- Greater ease of transfer between institutions and academic exchange programs, with an academic calendar consistent with the majority of colleges and universities in Ohio, the United States, and around the world.

When will the semester system be implemented?

The new semester system will become effective Summer 2012. All of OSU will convert at the same time.

[SENR Curriculum being prepared for Semester Conversion](#)

[Semester Planning: What can current students do now?](#)

[How will Earned Course Credits be Handled?](#)

[Q2S Course Numbering](#)

[OSU Pledge to Undergraduate Students](#)

[Semester Calendars for Academic Years 2012-2013 through 2016-2017](#)

Check back here often for updates on the School of Environment and Natural Resources Q2S.

School Of Environmental & Natural Resources

<http://senr.osu.edu/secondaryprint.asp?>

[id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=SENR_Q2S_Curriculum_Conversion](http://senr.osu.edu/secondaryprint.asp?id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=SENR_Q2S_Curriculum_Conversion)



[SEN](#) Quarter to Semester Conversion

Preparing the SENR Curriculum for the Semester Conversion

Over the past year, SENR faculty and staff in consultation with students, alumni, and stakeholders have been developing courses and majors that will be implemented at the time of the conversion. The SENR semester majors and courses have been proposed and are now starting the review and approval process. This starts with review and approval by the SENR Academic Affairs Committee and the SENR Faculty. The College of Food, Agricultural and Environmental Sciences will conduct an administrative and fiscal review as well. Eventually, the University's Council on Academic Affairs (CAA) will review the curriculum and courses being established or revised by the School of Environment and Natural Resources. Ultimately, the OSU Board of Trustee will review and give its approval.

The SENR majors being proposed under the new Semester system are:

1. Environmental Science (ES)
2. Environmental Policy and Decision Making (EPDM)
3. Forestry, Fisheries and Wildlife (FFW)
4. Parks, Recreation and Resource Management (PRRM)

All SENR majors will take a common core of major courses which will be slightly expanded under the new semester curriculum. Most of the SENR majors will remain relatively intact with a variety of enhancements to program options and courses being offered by the School.

How will the SENR Courses be Converted?

All current SENR courses will "disappear" from the course catalog and master schedule starting Summer 2012. In their place will be the semester courses. Several courses it will be a "straight" conversion with just a change in course number and credits and possibly title. These courses will appear as direct transfer in the degree audit.

In other cases, courses have been changed significantly because of being combined with other courses. How these courses transition into filling major requirements will vary, depending on what a student has taken. Some semester courses will be completely new. In most cases these

won't fill an old requirement but, under special circumstances, may be used to satisfy a particular curriculum requirement where a requirement gap may exist. This will be determined by the student's faculty advisor, the SENR Secretary, and the SENR Academic Affairs Committee.

School Of Environmental & Natural Resources

http://senr.osu.edu/secondaryprint.asp?id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=Q2S_Semester_Planning



SENR Quarter to Semester Conversion

Semester Planning: What Can Current Students Do Now?

If you are going to be here for the quarter to semester switch (Summer 2012) you are a transition student, here's what you should be doing now:

1. Get those science and math GEC's done before the conversion if you've been putting them off. The courses will be longer with more material covered under semesters. That goes for any other course you've been dreading.
2. You can start preparing yourself mentally for taking FIVE 3 hour courses a semester instead of THREE 5 hour classes. A common mistake for students moving from quarters to semesters is to not take enough classes. You'll need a minimum of 121 hours to graduate under semesters, so if all courses were done under semesters that's $121 \div 8 = 15.1$ hrs/semester.
3. You will most likely have classes all 5 days a week. It will be harder to schedule those Mondays and Fridays off.
4. About half of your courses will meet only on M, W, F and the other half of your courses only on Tu and Th so if you miss a M and/or W, you'll miss 1/3 to 2/3 of those M,W, F courses.

School Of Environmental & Natural Resources

http://senr.osu.edu/secondaryprint.asp?id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=Q2S_and_Earned_Credits



SENR Quarter to Semester Conversion

How will earned course credits be handled?

For transition students (those who start under quarters and finish under semesters), the credit hours for quarter courses will be converted to semester credits at the conversion rate of 0.6667.

For example, a 5 hr quarter course will be converted to $5 \times 0.6667 = 3.3$, 4 qtr. credits will convert to 2.6, and 3 credits become 2 under semesters.

Required Hours for Graduation:

For most majors, a minimum of 121 semester hours (to fill the required categories) will be required for graduation. (For most current SENR majors the minimum amount is 181 quarter hours to fill the required categories). Transition students will graduate when they have the required number of semester hours and those hours fill required categories.

School Of Environmental & Natural Resources

http://senr.osu.edu/secondaryprint.asp?id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=Q2S_Course_Numbering



SENR Quarter to Semester Conversion

Q2S Course Numbering

All semester courses will be 4 digits, to distinguish them from quarter courses.

- 1000- UG (undergrad) – Non Credit Courses for orientation, remedial, or other non-college
1099 level experiences (like math 040 and 075 currently).
- 1100- UG – Basic courses providing undergraduate credit, but not to be counted toward a
1199 major or field of specialization in any department. Courses at this level are beginning courses, required or elective courses that may be prerequisite to other courses.
- 2000- UG – Intermediate courses providing undergraduate credit and may be counted
2099 toward major or field of specialization.
- 3000- UG – Upper level courses providing undergraduate credit that may be counted
3099 toward major or field of specialization.
- 4000- UG – Advanced courses providing undergraduate credit that may be counted
4099 toward major or field of specialization. Graduate students may receive graduate credit outside their own graduate program.
- 5000- UG and Graduate (G) courses providing undergraduate credit that may be counted
5099 toward major or field of specialization and foundation graduate credit.
- 6000- G – Foundational level graduate courses and research
6099
- 7000- G – Foundational level graduate courses and research
7099
- 8000- G – Advanced level graduate courses and research
8099

School Of Environmental & Natural Resources

<http://senr.osu.edu/secondaryprint.asp?>

[id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=OSU_Pledge_to_Undergraduate_Students](http://senr.osu.edu/secondaryprint.asp?id=1c=SENR_Quarter_to_Semester_Conversion&info=&pageid=OSU_Pledge_to_Undergraduate_Students)



Quarter-to-Semester Update

[SENR Quarter to Semester Conversion](#)

OSU Pledge to Undergraduate Students

In planning and implementing its conversion from quarters to semesters for summer 2012, The Ohio State University is committed to protecting the academic progress of students. Students should find that the shift from quarters to semesters does not disrupt progress toward their degrees if they:

1. decide on their major and degree within a time compatible with four-year graduation;
2. meet the standards for progress defined by their academic unit and continue to complete appropriate course loads successfully; and
3. actively develop and follow academic plans in consultation with their academic advisors.

Students completing a quarter-plus-semester degree program will receive approximately the same amount of instruction, and the changes to the calendar and to courses should only improve the quality of programs. Full-time tuition (general and instructional fees) for an academic year under semesters will not cost more than what tuition would have cost for that same year under quarters, and the change should not adversely affect students' financial aid.

To ensure that the conversion will not harm students' progress, academic units will continue to provide intentional, purposeful advising. Academic advisors will understand how the changes in courses and curricula may affect students' degree programs, will know where and how programs can be flexible, and will be prepared to assist students in planning their remaining semesters to graduation. Good planning around a student's major will be particularly important, and the university will provide that support to students who begin their academic career under quarters and complete it under semesters.

Students will vary considerably in their academic progress, and each student's plan for completing degree requirements will need to be determined individually. Every student will be responsible for getting and using the advice essential to assure progress toward his or her degree. Advising is a joint endeavor, and we are confident that students and their advisors, working together, can develop effective plans leading to timely graduation as the university converts to semesters.

[The Ohio State University \(http://www.osu.edu/\)](http://www.osu.edu/) [University Registrar \(http://www.osu.edu/ureg/index.html\)](http://www.osu.edu/ureg/index.html)

Academic Calendar

Ohio State's **conversion to semesters** will begin in [Summer 2012 \(bigcal.html\)](#). See the [Quarter to Semester Calendar Conversion website \(http://oaa.osu.edu/semesterconversion.html\)](#) for more details.

- [Quarter Calendars for Academic Years 2012-2013 through 2016-2017 \(html\) \(bigcal.html\)](#)
- [Printer-friendly Quarter Calendars for Academic Years 2009-2010 through 2011-2012 \(pdf\) \(bigcal_pdf.pdf\)](#)
- [Printer-friendly Semester Calendars for Academic Years 2012-2013 through 2016-2017\(pdf\) \(bigcalsem.pdf\)](#)
- [OSU Events Calendar \(http://www.osu.edu/events/indexWeek.php\)](http://www.osu.edu/events/indexWeek.php)
- [Get Adobe Acrobat Reader to read pdfs \(new window\) \(http://www.adobe.com/products/acrobat/readstep.html\)](http://www.adobe.com/products/acrobat/readstep.html)

The calendar was last updated on May 27, 2010 and is subject to change. For questions, contact the [Office of the University Registrar \(mailto: registrar@osu.edu\)](mailto:registrar@osu.edu).

ACADEMIC YEAR (SEMESTERS)	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
AUTUMN SEMESTER	Autumn 2012	Autumn 2013	Autumn 2014	Autumn 2015	Autumn 2016
Classes begin	Aug 22 (W)	Aug 21 (W)	Aug 27 (W)	Aug 26 (W)	Aug 24 (W)
Labor Day - no classes, offices closed	Sept 3 (M)	Sept 2 (M)	Sept 1 (M)	Sept 7 (M)	Sept 5 (M)
Veterans' Day observed - no classes, offices closed	Nov 12 (M)	Nov 11 (M)	Nov 11 (T)	Nov 11 (W)	Nov 11 (F)
Thanksgiving - no classes, offices closed	Nov 21-23 (W-F)	Nov 27-29 (W-F)	Nov 26-28 (W-F)	Nov 25-27 (W-F)	Nov 23-25 (W-F)
Last day of regularly scheduled classes	Dec 4 (T)	Dec 3 (T)	Dec 9 (T)	Dec 8 (T)	Dec 6 (T)
			Dec 11-17 (R-)	Dec 10-16 (R-)	

Final examinations	Dec 6-12 (R-W)	Dec 5-11 (R-W)	Dec 11-17 (R-W)	Dec 10-16 (R-W)	Dec 8-14 (R-W)
Fall commencement	Dec 16 (Sun)	Dec 15 (Sun)	Dec 21 (Sun)	Dec 20 (Sun)	Dec 18 (Sun)
SPRING SEMESTER	Spring 2013	Spring 2014	Spring 2015	Spring 2016	Spring 2017
Classes begin	Jan 7 (M)	Jan 6 (M)	Jan 12 (M)	Jan 11 (M)	Jan 9 (M)
Martin Luther King Day - no classes, offices closed	Jan 21 (M)	Jan 20 (M)	Jan 19 (M)	Jan 18 (M)	Jan 16 (M)
Spring Break	March 11-15 (M-F)	March 10-14 (M-F)	March 16-20 (M-F)	March 14-18 (M-F)	March 13-17 (M-F)
Last day of regularly scheduled classes	April 22 (M)	April 21 (M)	April 27 (M)	April 25 (M)	April 24 (M)
Final examinations	April 24-30 (W-T)	April 23-29 (W-T)	April 29-May 5 (W-T)	April 27-May 3 (W-T)	April 26-May 2 (W-T)
Spring commencement	May 5 (Sun)	May 4 (Sun)	May 10 (Sun)	May 8 (Sun)	May 7 (Sun)
SUMMER SEMESTER	Summer 2013	Summer 2014	Summer 2015	Summer 2016	Summer 2017
May Session Begins	May 6 (M)	May 5 (M)	May 11 (M)	May 9 (M)	May 8 (M)
Memorial Day - no classes, offices closed	May 27 (M)	May 26 (M)	May 25 (M)	May 30 (M)	May 29 (M)
May Session Ends	May 31 (F)	May 30 (F)	June 5 (F)	June 3 (F)	June 2 (F)
Summer Session Begins	June 10 (M)	June 16 (M)	June 15 (M)	June 13 (M)	June 12 (M)
Independence Day - no classes, offices closed	July 4 (R)	July 4 (F)	July 3 (F)	July 4 (M)	July 4 (T)
Last day of regularly scheduled classes	July 26 (F)	Aug 1 (F)	July 31 (F)	July 29 (F)	July 28 (F)
Final examinations	July 29-31 (M-W)	Aug 4-6 (M-W)	Aug 3-5 (M-W)	Aug 1-3 (M-W)	July 31-Aug 2 (M-W)
Summer commencement	Aug 4 (Sun)	Aug 10 (Sun)	Aug 9 (Sun)	Aug 7 (Sun)	Aug 6 (Sun)

The Ohio State University

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SENR Semester Programs: Assessment Plans

SENR programs do not have assessment plans already on file with the University. The following selections below have been indicated in the online program proposal system to describe the preliminary assessment plans for SENR programs. Full plans for undergraduate and graduate programs will be completed for submission to the University in the spring of 2011, in collaboration with Dr. Warren Flood and his work to finalize assessment plans in the College of Food, Agricultural and Environmental Sciences. An important basis for assessment is the set of program learning goals detailed in the different curriculum maps for each SENR undergraduate major and several SENR graduate programs. Details have been added below to specify the measures currently used to assess SENR programs. Different assessment methods are used across the range of SENR degree programs, as indicated below,

Direct Methods of Assessment:

Undergraduate:

Standardized tests:

-Certification or licensure examinations for FFW students: *The Wildlife Society, American Fisheries Society, and Society of American Foresters certifications are available to students completing various specializations in the FFW major.*

Classroom Assignments:

-Other classroom assignment methods: *Current SENR students must complete ENR 567 (3rd writing course), which evaluates written and oral communication skills. Portions of what is currently assessed in ENR 567 will be shifted in semesters to ENR 2367 (a 2nd writing course), ENR 4900.01/4900.02 (the ENR capstone courses, with integrative projects and assignments, written and oral, to assess students' mastery of a range of ENR knowledge and skills), and to an additional writing assessment component that will be added to an upper level required course in each major that includes a significant writing component (e.g., 4900.01, 662/5362, 642/5642). In this latter case, writing assignments in these upper level courses will be graded both by the content instructor and by a qualified writing instructor designated by the School, to assure that students achieve a satisfactory level of writing mastery.*

Evaluation of a body of work produced by the student:

-Capstone course reports, papers, or presentations : *ENR 606.01/4900.01 and 606.02/4900.02 are the SENR capstone courses, which require students to demonstrate an integrative knowledge and proficiency following on their environment and natural resource education and training in SENR.*

Graduate:

Direct assessment methods specifically applicable to graduate programs:

- Candidacy exams: *PhD students must complete a written and oral candidacy exam prior to proceeding with their dissertation research.*
- Research proposals written: *PhD students must complete a research proposal approved by their committee to proceed with dissertation research; MS students enroll in a research course (800/8998) and a research proposal symposium (897/8897) to develop and present their thesis research proposal; MENR students must gain approval of their project topic by their advisory committee and the director of graduate studies, and their independent project and program of study must also be approved by their committee.*
- Thesis/dissertation oral defense and/or other oral presentation: *MS and PhD students must pass an oral defense, and also give a public thesis presentation (PhD students present their research in the SENR seminar series); MENR students complete an oral Final Master's Examination.*
- Thesis/dissertation (written): *MS and PhD students complete written theses and dissertations; MENR students complete a written Final Master's Examination.*

Indirect Methods of Assessment:

Undergraduate:

Surveys and Interviews:

- Student survey : *SENR social science faculty have created a pre- and post-test survey instrument for SENR students, which students complete upon entering SENR and then again in their final semester. The survey evaluates environmental learning, attitudes, career interests, and other measures of student progress and experiences linked to SENR program objectives, and these results inform program vision and revision.*
- Alumni survey : *SENR social science faculty periodically complete phone interviews with SENR alumni to examine their long-term learning, job success, and retrospective views of SENR programs; these results inform program vision and revision.*
- Student Evaluation of Instruction : *SENR instructors use SEI's to evaluate their own teaching; SENR administration uses SEI's in part to gauge instructor success.*
- Student interviews or focus groups : *SENR director and other administrators conduct exit interviews with a sample of graduating SENR students to evaluate their success and satisfaction with SENR programs. These interviews inform shaping and direction of current and future programs.*

Graduate:

Additional types of indirect evidence:

- Job or post-baccalaureate education placement: *SENR administrators keep track of job placement of graduates as a measure of program success.*

How the program uses or will use the evaluation data to make evidence-based improvements to the program periodically (select all that apply):

- Meet with students directly to discuss their performance : *Meetings with students occur throughout the SENR curriculum, particularly in relation to term projects, capstone projects, and graduate theses and projects.*
- Analyze and discuss trends with unit's faculty : *results of surveys and exit interviews are shared in faculty meetings, and have been used extensively in preparing the SENR semester curriculum; ongoing review of the semester curriculum, particularly during 2012-2014, with continue this process.*
- Analyze and report to college/school : *survey results have been reported to the College and across the university.*
- Make improvements in curricular requirements : *survey and interview results were used extensively to shape the semester curriculum, and will be similarly employed to shape revisions to the semester curriculum in coming years.*
- Make improvements in course content : *information from meetings with students, SEI's, surveys and interviews are all used to improve course content; course revisions and improvements were a particular focus of the curriculum planning process for the Q2S conversion, and will remain a focus particularly during 2012-2014 as the semester curriculum is refined and optimized.*
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals: *survey results are particularly useful as evidence of success in this area.*

SENR Natural Resource Management Major

The goal of the Natural Resource Management (NRM) major is to provide graduates with knowledge of the relationships between humans and the environment and develop skills to sustainably manage the use of natural resources. Through SENR and NRM core courses, students will build a foundational understanding of the natural and human dimensions of natural resource management. Students then develop additional training by completing the coursework in a particular specialization area. Course concepts are applied to real-world situations through both an experiential learning component (e.g., internship or study abroad) and a capstone course.

Specialization areas are further described below.

Parks and Recreation

The Parks and Recreation specialization is designed to prepare students to work in a variety of organizations that manage recreation areas and offer recreation programming. All students selecting this specialization will complete additional coursework in communication, law and legal processes, planning, and management. Students will then develop focused training in a particular aspect of recreation through selecting courses in forestry, fisheries, wildlife, soil and water, or visitor services. These sub-specialization areas provide a depth of understanding and expertise in a selected recreation-related content area and prepare students for workplace success. Students who complete this specialization will be eligible to receive certification as a “Certified Parks and Recreation Professional” by completing requirements specified by the National Recreation and Parks Association. Graduates will be prepared for positions within the recreation management programs of federal, state, or local land management agencies (such as the National Park Service, U.S. Forest Service, or state parks) as well as for non governmental organizations.

Natural Resource Administration and Management

The Natural Resource Administration and Management specialization provides experience and training to work in the administration of government and private organizations that manage natural resources. All students selecting this specialization receive additional training in communication, law and legal processes, planning, leadership, and finance. Students may then choose to pursue a depth of understanding in a particular natural resource content area (forestry, fisheries, wildlife, soil and water, or visitor services) or increase their breadth of knowledge by selecting courses across these areas. Students who complete this specialization will be prepared for administrative positions within federal, state, or local land management agencies (such as the National Park Service, U.S. Forest Service, or state parks) as well as for non governmental organizations (nature conservancies).

Sustainable Agriculture

In addition to providing foundational understanding in the field of natural resource management, students will also gain practical experience and substantive knowledge of sustainable agriculture. Foundational knowledge in the environmental and production, social, and economic dimensions of sustainable agriculture will be provided as well as integrative and experiential training in the practices of sustainable agriculture. The

specialization provides flexibility to allow students to develop additional expertise in a particular area of sustainable agriculture, including production related skills, planning for sustainable agriculture and food systems, or business management. Students in this specialization will be prepared to work with federal, state, or local resource management agencies (such as the Natural Resource Conservation Services) or non governmental organizations focusing on sustainable agriculture production or urban food systems. Students might also consider working in the private sector, including in farming or for businesses servicing the farm sector.

Course	Critical Thinking/ Problem Solving		Application of Theoretical Concepts	Oral Communication	Written/Graphic Comm	Understand natural systems	
	Identify the varied and conflicting perspectives that guide choices about ENR issues.	Synthesize and distill key components of information streams relative to ENR issues.	Apply class concepts to better understand and address ENR issues.	Demonstrate successful formal presentation and informal discussion skills.	Demonstrate technical, narrative and graphic communication skills appropriate for target audiences.	Understand the structure and function of biological and physical systems.	Demonstrate competency in a specific natural resources content area (e.g., soil, water, ffw).
ENR 100/119 Professional Survey in ENR				I	I		
ENR 203 Society and Natural Resources	I	I	A	I/R	I/R		
ENR 221 Biology and ID of Woody Plants						I	I
ENR 322 Forest Ecosystems						I/R	I/R
ENR 323 Forest Biometry						R/A	R/A
ENR 333 Silviculture						R/A	R/A
ENR 340 Concepts of Parks and Recreation	R	I	A		I		
ENR 350 Wildland Fire Management						I/R	A
ENR 355 Water Quality Management						R/A	A
ENR 367 Making and Meaning of American Landscape (Simpson)	I	I/R	I	I/R/A	R/A	I	
ENR 400 Environmental Policy	I		A	R			
ENR 410 Env Interpretation and Visitor Services (Rasche)	I	I	I/R/A	I/R/A	I/R/A		
ENR 410 Zoo Science and Management				I/R/A	I/R/A		
ENR XXX Outdoor Recreation Behavior							
ENR 4XX Environment and Natural Resources Law							
ENR 432 Sustainable Forest Products	I/R		R/A		R/A		R/A
ENR 442 Soil Management			R/A			R/A	R/A
ENR 448 Law Enforcement (Giese/Dodd)	I	I	I	A	A	R	R
ENR 510 Natural History of Ohio			R/A	R/A	R/A	R	
ENR 531 Env Economics (Partridge)	I	R/A	R/A				
ENR 567 Communicating ENR Information (Hitzhusen)	R	R/A	R/A	R/A	R/A		R
ENR 601 Environ Impact Assessment (Fineran)	R/A	R/A	I/A	R	R	R/A	A
ENR 602 International EIA (Fineran)	R/A	R/A	I/A	R	R	A	A
ENR 606 Senior Capstone (Fineran 606.01)	R/A	R/A	R/A	R	R	A	A
ENR 618 Ecological Engineering and Science			A			R/A	R/A
ENR 620 Principles of Fisheries Ecology and Management						R/A	R/A
ENR 622 Stream Ecology						R/A	R/A
ENR 623 Principles of Wildlife Ecology and Management						R/A	R/A
ENR 624 A and B Mammalian Ecology, Biology, and Management						R/A	R/A
ENR 625 Management of Wildlife Habitat						R/A	R/A
ENR XXX Taxonomy and Behavior of Fishes						R/A	R/A
ENR 626 Methods in Aquatic Ecology						R/A	R/A
ENR 640/641 Nat Res Planning	A	A	A		A		
ENR 642 NatRes Admin (Peck)	R/A	R/A	A	A	R		R/A
ENR 649 Wildlife Conservation Policy	R	R		R	R		A
ENR 650 Soil Landscapes: Morphology, Genesis and Classification						R/A	R/A
ENR 651 Water Institutions and Policy	I	I	A		R		
ENR 656 Ecosystems of the World			A			R/A	R/A
ENR 660 Soil Chemical Processes						R/A	R/A
ENR 662 Wildlife Ecology Methods						R/A	R/A
ER 675 Environmental Fate and Impact of Contaminants in Soils and Water						R/A	R/A
ENR 684/689 Internship							
ENR 725 Wetland Ecology and Management			A			R/A	R/A
ENR 736 Public Forest Policy	R		A	R			
ENR 752 Env Science and Law	I		A		R		
ENR 756 Rehabilitation/Restoration of Ecosystems			A			A	A
<i>Cross-listed or contract instructors in parentheses</i>							
RATINGS							
Introduced (I): Early introduction of topic/skill							
Reinforced (R): Advanced coverage of topic/use of skills building on earlier introductions							
Applied (A): Application of knowledge/skills to real-world problems/experiences							

