

Interdisciplinary Masters of Natural Resource Degree at Oregon State University Online



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Sustainable Forests Partnership

- **Began at OSU in 1995 and partners include:**
 - Oregon State University
 - Auburn University
 - Pennsylvania State University
 - USDA Cooperative State Research, Education and Extension Service (USDA-CSREES)
- **Expanded partnership in 2005**
 - 10 Universities and 2 affiliate members

Sustainable Forests Partnership

- Partnership Mission

- *The Sustainable Forests Partnership's mission is to document and promote innovation in sustaining forests and communities and assists others to integrate this innovation into policy and practice.*

Sustainable Forests Partnership

- **Key goals are:**
 - Identify key sustainable forestry issues and trends
 - Design and conduct sustainable forestry research
 - Develop educational and training materials and events
 - Assist organizations and individuals interested in sustainable forestry issues

SNR Graduate Certificate Program

- Online Program through OSU Ecampus
- Organizes and integrates courses in ecology, economics and social sciences
- Explores sustainable solutions for complex resource problems
- <http://www.cof.orst.edu/SNRcertificate>

SNR - Curriculum

■ Integration (3 credits)

- SNR 506* (2) Independent Project in NR sustainability
(Bishaw-FES & mentors)
- SNR 511* (1) Sustainable NR Development
(Bishaw - FES)

■ Human dimensions (9 credits)

- SNR 520* (3) Social Aspects of Sustainable Natural resources
(Lach-SOC)
- SNR 521* (3) Economics of Sustainable NRM
(Kerkvliet-ECON & Rosenberger-FES)
- SNR 522 (3) Basic Beliefs and Ethics in Natural Resources
(Vogt-PHIL)

SNR - Curriculum

- **Ecology and Management (15 credits)**
 - SNR 530* (3) Ecological Principles of Sustainable NR (David Perry-FES)
 - SNR 531 (3) Sustainable Silviculture & Forest Certification (Fletcher-FERM & Bailey FERM)
 - SNR 532 (2) Planning Agroforestry Projects (Bishaw-FES)
 - SNR 533 (2) Alternative Forest Products (Liegel-FES)
 - SNR 534 (2) Reduced Impact Timber Harvest (Kellogg-FERM)
 - SNR 535 (3) Sustainable Management of Aquatic and Riparian Resources (Ford-FW)
 - SNR 540 (3) Global Environmental Change (Turner –FES)
- * Indicates required course

Scholarship and Learning Outcomes

- A stand-alone, 18-credit Graduate Certificate in Sustainable Natural Resources (=12 Semester credits)
- Enhance leadership skills and scientific expertise to meet the global demand for effective SNRM.
- **Student complete a capstone project that address specific sustainability problem**

Current Status of the SNR Program

- Started in winter 2007
- Most courses are offered twice per year
- Enrollment:
 - 40 individual students enrolled in one or two SNR courses (Fall 2009)
 - 20 students in SNR Certificate Program
 - 2 students already received the Certificate
 - 22 states and 3 countries are represented
- December 2007 OSU joined the NRDL Consortium

Masters of Natural Resources Degree (Evidence of Need)

- Conversation with professionals from around the country and current and prospective SNR Graduate Certificate students.
- Most potential students ask about availability of Master of Natural Resources degree.
- An overwhelming support from the USFS, BLM, Oregon Department of Forestry and Oregon Department of Fisheries and Wildlife.
- Currently there is no online MNR degree at OSU. The MNR program assist OSU filling this gap.

MNR Program Goals

An **interdisciplinary program** to engage university scientists and world-wide natural resource professionals.

- **Integrates diverse perspectives** about natural resource situations at the state, regional, national and international levels.
- Assists agency and industry personnel to meet their **self-improvement** goals.
- **integrate multiple disciplines** through the curriculum, with assignments and case study projects tailored to student needs.

Participating Colleges and Departments

- 5 Colleges and 12 Departments
 - Forestry (2 departments)
 - Science (3 departments)
 - Agricultural Sciences (4 departments)
 - Liberal Arts (4 departments)
 - Oceanic and Atmospheric Sciences (1 department)

MNR Curriculum

- **The MNR is 45-credits interdisciplinary program.**
- **primarily taught as online curriculum.**
- **MNR curriculum is organized into three main sections:**
 - Core (18 credits)
 - Area of emphasis (18 credits)
 - Independent study (9 credits)

MNR Curriculum

- **Core area is divided into four sections:**
 - Overview/Introduction to sustainability (3 credits)
 - Ecology/production (6 credits)
 - Human systems (6 credits)
 - Methodology (3 credits)

MNR Curriculum

- **Area of Emphasis (18-credits)**
 - Certificate programs at OSU
 - Geographic Information Systems (GIS)
 - Marine Resources Management (MRM)
 - Sustainable Natural Resources (SNR)
 - Water Conflict Management and Transformation (WCMT)
 - Fisheries Management
 - *Or, no certificate – student designs option*

MNR Curriculum

- **Independent study**

- Master's Case study is a problem- solving experience.
- It will be conducted by all MNR students as the capstone of their academic program at OSU.
- Provides students experience about future work environment.
- Provides client organizations with solutions to complex natural resource issues.

Table 1: Overall Programmatic Framework*

	THEMES			
MNR SECTIONS	Overview/ Introduction	Ecology/Production	Human Systems	Metho dology
Core (18 credits) <i>provides breadth</i>	<i>3 credits</i>	6 credits	<i>6 credits in 3 or more areas:</i>	<i>3 credits</i>
			Economics	
			Policy	
			Sociology	
			Ethics	
			Communication	
Area of Emphasis (18 credits) <i>provides depth</i>	<i>May be a certificate:</i>			
	Geographic Information Systems (GIS)			
	Marine Resources Management (MRM)			
	Sustainable Natural Resources (SNR)			
	Water Conflict Management and Transformation (WCMT)			
	Fisheries Management			
	<i>Or no certificate – student designs option</i>			
Capstone Project (9 credits)	Master’s Case Study Choose one option: <i>Option 1: 9 credits of MNR 506</i> <i>Option 2: 6-7 credits of MNR 506 plus 2-3 credits from an Independent Study Project or internship that was completed as part of an 18-credit graduate certificate.</i>			

Students Requesting MNR Program

- 5 SNR students have already expressed interest and requested to enroll in the MNR program.
- “I'm very much enjoying the SNR Graduate Certificate Program thus far. My ultimate goal is to obtain a masters degree in an NRM-related field”. (Christy M., SNR student)
- “Upon completion of the SNR program, I planned to transfer to another university to seek an MNR degree, but would much prefer to stay at OSU if it is possible to get an MNR degree here.” (Todd B., former SNR student).
- Currently there are 16 students waiting to enroll in the program.

Admission Requirements

- **Students with the equivalent of a Bachelor of Arts (B.A.) or Bachelor of Sciences (B.S.) in one of the following areas:**
 - Natural and Life Sciences
 - Natural Resource Management
 - Forestry, Agriculture, Fisheries, Wildlife
 - Environmental Studies, Environmental Sciences
 - Public Policy or Social Science
- **At least a Cumulative GPA of 3:00**
- **At least two years of professional work experience recommended**
- **GRE and TOFEL scores**
- **Three recommendation letters**
- **Applications are assessed by admission committee**

Student Advising

- **Students enrolled in the MNR degree will have a Graduate Advisory Committee (GAC) to determine course of study.**
- **The GAC will consists of:**
 - **A professor from the student's area of emphasis (serve as primary advisor/major professor)**
 - **Other professor reflecting breadth or depth of student curriculum**
 - **Graduate School representative**

Teaching Faculty

- **Core Faculty** (Bishaw, Doescher and Radosevich)
- **Teaching Faculty**
 - The graduate faculty for the MNR program consists of currently teaching online graduate courses that are relevant to the MNR program
- **Courtesy and Adjunct Faculty**
- **Each person is contacted and affirm his/her interest to MNR program**

Administration of MNR

- The MNR degree will be administered by a Committee consisting of:
 - MNR Director/Advisor,
 - Directors of each certificate (area of emphasis),
 - 2 at-large members who represent colleges with strong teaching component in the MNR program

Administrative Staff for MNR

- One MNR program Director /Advisor
- One program administrative support

Program Funding

- Long-term funding will be supported by tuition received from on-line courses taken for the degree.
- On-line course tuition will be shared among the participating departments or Graduate Certificate programs according to e-campus formula.
- Revenue generated from COF and MNR courses will flow to the College for program Administration.
- Short-term funding for administrative costs of the MNR degree is supported by Ecampus.

Status of MNR Program

Committees	Decision
Budget and Fiscal Planning	Approved
Graduate Council	Approved
Curriculum Council	Approved
Faculty Senate	Approved
OSU Provost's Council	Approved
OUS Provost's Council	Approved
External Review	On progress
Oregon University Systems	

MNR Program will start fall 2010

OSU's sustainability path draws nationwide attention

BY COURTNEY SHERWOOD
BUSINESS JOURNAL STAFF WRITER

Oregon State University's graduate certificate in sustainable natural resources has drawn a national following in just two and a half years.

Because OSU offers the classes through the university's eCampus program, people from regions with no similar offerings available are signing up for the 18-credit certifi-



Bishaw

cate, said Badege Bishaw, director of the university's Sustainable Natural Resource Graduate Program. "Most of them are employees of natural resource programs who have many years of experience," Bishaw said. Core courses cover broad issues surrounding sustainable natural resource development, and different aspects of human interactions with the environment. Then students specialize, choosing from electives in forestry, fisheries or water resource issues, depending on their professional interests.

"Students are also required to do a capstone project in their region or within their organization," Bishaw said.

Admission to the certificate program requires a bachelor's degree, recommendations, and work experience in natural resource management. Applicants must

PROGRAM: Graduate certificate in sustainable natural resources.

SCHOOL: Oregon State University, offered online.

TIME TO COMPLETE: One to two years, depending on course load.

COST: Approximately \$8,300 in-state tuition, plus extra for class materials.

also have a grade point average of 3.0 or higher for roughly the last two years of coursework.

Most classes are available to people not interested in pursuing a full certificate, as well. These students still must have an undergrad degree, but need not meet the program's other admission requirements.

So far, 22 students have enrolled in the certificate program, and another 85 have taken courses as students not seeking a certificate, Bishaw said.

Only two students have received certificates from the still-young program.

Kyle Smith, an assistant forester in The Nature Conservancy's Ellsworth Creek Preserve in Southwest Washington, was one of those students.

Smith, who has worked in natural resources for nine years, said that he was attracted to the program because of the quality of the faculty and the opportunity to take classes while still working full time. But learning from students from around the world took the program to another level, he said.

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Questions?

