I. Departmental History, Mission, and Goals

MISSION STATEMENT

The mission of the Environmental and Natural Resource Sciences Department is to provide an undergraduate and graduate educational environment that develops and fosters the capability to analyze, understand, manage and improve the relationships among people, ecosystems and natural resources.

GOALS

The goals of the ENRS Department are to develop in our graduates:

Goal 1: an understanding of and appreciation for the complexity of ecosystems, including their composition, structure and function.

Goal 2: an understanding of human/natural environment interactions and how those interactions can be managed to benefit people, while maintaining the character, functioning, and productivity of ecosystems and natural resources.

Goal 3: a capacity and desire to educate themselves with regard to natural resources and the natural environment.

Goal 4: the analytical skills necessary to address natural resource and environmental problems and propose effective solutions.

Goal 5: the practical skills necessary to communicate natural resource and environmental science to both scientific and non-scientific publics.

Goal 6: the ability to reason and use sound scientific judgment, and to develop a commitment to honesty and integrity in applying scientific principles in the public debate regarding natural resource management.

In addition, the ENRS Department:

7) provides opportunities for students to acquire practical experience in their chosen option;

8) provides graduate learning opportunities through the Masters of Natural Resources graduate program, and

9) prepares our graduates for advanced study and/or productive professional careers that deal with the human-environmental interface.

HISTORY

The Environmental and Natural Resource Sciences Department began in 1975 as the Natural Resources Planning and Interpretation Department, with the NRPI major as its only undergraduate degree program. The major had three options: NR Planning, NR Interpretation, and Individual Design. In the 1990's, two new options were added as the result of student demand and career opportunities: NR Recreation and Geographic Information Systems & Remote Sensing.

In 1994, a new degree program called Environmental Ethics and Technology was created; it was administered out of the CNRS Dean's office. This major was renamed Environmental Science in 1996. In 2002, the Environmental Science major was incorporated into the NRPI department, at which time the name of the department was changed to Environmental and Natural Resource Sciences.

A relatively small department to start with (7 FT-TT faculty at its peak in 2003/04), ENRS has seen two senior faculty FERP (Dr. Carlson is entering his 5th and final year, while Dr. Hansis (ENVS) enters his fourth year of FERP and has a reduced appointment that is less than 0.5), and two other members leave for private sector employment; none have yet been replaced. However, for a small department, we have a very active and successful faculty, with one Professor of the Year, two Fulbright scholars, one editor of a national journal, and two McCrone Promising Faculty Scholar award recipients in the past 10 years.

But, the small and ever diminishing size of our full-time faculty has meant that 1) well over half of our curriculum is taught by part-time lecturers; 2) we have some of the largest advising loads on campus; and 3) it is difficult to maintain a vibrant graduate program with so few full-time faculty to accept and advise graduate students.

One other significant change to note is that beginning in Fall 2008, the ENVS curriculum has been completely replaced by an entirely new curriculum, with three new options replacing the original options, new courses created, and a new faculty position hired. While these changes bring with them much promise and potential, they also render nearly moot much of the ENVS student enrollment data (headcount, FTES, etc.) from past years. Also, without a single FT faculty member in ENVS for the past three years, it is difficult to report much in the way of faculty activity for that program.

II. **Departmental Faculty and Staff**

Environmental & Nat Res Sci Dept Instructors -- AY Average Count of Appointments facpos_ENRS report generated: 22-FEB-08						
Appt Category	**AY 02/03**	**AY 03/04**	**AY 04/05**	**AY 05/06**	**AY 06/07**	**AY 07/08**
Lecturer	7	3	4	5	5	7
Assist Prof	3	3	0	0	0	0
Assoc Prof	1	2	4	5	5	4
Professor	2	2	2	2	2	2
Teach Assoc	0	2	1	2	1	0
Volunteer	0	0	1	1	0	0
Total	**13**	**12**	**11**	**14**	**12**	**13**

*note: the totals are incorrect in several of these columns

Environmental & Nat Res Sci AY average FTEF (time base totals) facpos_ENRS report generated: 22-FEB-08						
Appt Category	**AY 02/03**	**AY 03/04**	**AY 04/05**	**AY 05/06**	**AY 06/07**	**AY 07/08**
Lecturer	2.38	1.17	1.72	2.62	2.16	2.62
Assist Prof	3.00	3.00	.00	.00	.00	.00
Assoc Prof	1.00	2.00	3.50	4.00	3.99	3.47
Professor	2.00	2.00	1.50	1.50	1.50	1.50
Teach Assoc	.00	.26	.20	.40	.07	.00
Volunteer	.00	.00	.07	.02	.00	.00
Total	**8.38**	**8.43**	**6.99**	**8.53**	**7.71**	**7.59**

Environmental & Nat Res Sci department release/assigned time facpos_ENRS report generated: 22-FEB-08						
Assignment Description	**AY 02/03**	**AY 03/04**	**AY 04/05**	**AY 05/06**	**AY 06/07**	**AY 07/08**
Excess Enrollment (=>75)	.06	.06	.06	.10	.13	.07
Special Instr Programs	.07	.00	.02	.03	.00	.00
Instr-Related Services	.03	.00	.00	.00	.00	.00
Instr-Related Comm Assignmts	.10	.80	.20	.26	.10	.10
Dept Chair AY, Leaders/Dir.	.43	.43	.36	.36	.36	.36
Dept Chair - 12mo	.13	.13	.13	.13	.13	.13
Other State Funds	.00	.00	.00	.26	.00	.10
Grant: Academic	.00	.00	.00	.00	.32	.31
Total	**.82**	**1.42**	**.77**	**1.14**	**1.04**	**1.07**

Personnel (At least .5 FTE)

Name	**Position**	**Description of Specialty and Key Contributions (no more than 100 words per person)**
Dr. Steven Martin	Professor	NRPI: Natural Resources Recreation; Park and Wilderness Management; Department Chair
Dr. Carolyn Ward	Professor	NRPI: Environmental Interpretation and Education; Editor of *Journal of Interpretation Research*; current Professor of the Year; serves on Academic Senate; departs in 10/08 for a new job in NC.
Dr. Yvonne Everett	Associate Professor	NRPI: Natural Resources Planning; serves on Environment and community graduate program faculty; former Fulbright Scholar, serves on UCC
Dr. Steven Steinberg	Associate Professor	NRPI: Geographic Information Systems; Director Institute for Spatial Analysis, Director Klamath Watershed Institute; Fulbright Scholar
Dr. Alison Purcell	Assistant Professor	ENVS: Ecological Restoration; Program Coordinator for Environmental Science; **new as of Fall 2008**
Dr. Steven Carlson	FERP Professor	NRPI: GIS and Natural Resources Planning; chaired Strategic Plan committee
Mr. Jeffrey Dunk	Instructor (0.8)	NRPI: Ecology, Rare Species Conservation, Species Distributional Modeling; serves on Academic Senate

III. **Recruitment and Retention**

Describe any specific actions (other than HOP or similar standard efforts) the department has taken to recruit and/or retain students, particularly diversity students and/or students who are underrepresented in your discipline. What have been the results of those actions?

ENRS has created new brochures for both of its majors, created and updated a new web site, and created new large three-panel displays for both of its majors. We sent our new NRPI brochure to about 900 NRPI alumni last year and asked that they pass it on to a prospective student (or the parent of a prospective student). We participate in the local High School fair that brings high school students to campus for department visits. Our faculty have gone on recruiting trips with Admissions, and do recruiting activities at professional meetings, setting up and staffing displays. To help retain current students, we advise student clubs and student chapters of professional organizations (Natural Resources Club, GIS Club, Interpretation Club, all of which are also student chapters of their respective professional organizations).

IV. **Learning, Curriculum, and Assessment**

NRPI Student Learning Outcomes

Students will graduate with:

1. the ability to apply science to understanding ecosystems and natural resources.
2. an understanding of, and ability to analyze, human interactions with the natural environment.
3. the knowledge and skills to seek out the information and resources necessary to understand complex environmental issues.
4. the knowledge and skills to manage human use of environmental resources.
5. the ability to communicate with a variety of audiences, both orally and in writing.

Assessment to date

Outcome 5 was assessed during AY 2006-07, with the data being analyzed in May 2007. Student work from 35 students in three courses was used to gather a convenience sample of written and oral communication. The sample included high, medium, and low performers in each of the courses. A team of 4 NRPI faculty created and calibrated scoring rubrics for the assessment (one each for the written and oral components). The main finding of the assessment was that in only one of the three courses assessed for oral communications did a majority of students meet our standard, despite the fact that all three courses assessed were upper division courses. As a result, we used this information in the NRPI curriculum revision effort that was underway at the time and now require all students in the major to take our Environmental Communications course (previously only 2 of the 5 options were required to take it).

The assessment of outcome 1 was begun during the fall of 2007 and continued into Spring 2008. The assessment of outcome 2 was begun during the fall of 2007 and continued into Spring 2008. Assessment of both of these outcomes was completed and the results submitted to the Assessment Coordinator in August 2008. In summary, all students assessed on these two outcomes met or exceeded the standard.

Environmental Science Student Learning Outcomes

Through written, tangible or presentational assignments, students will demonstrate:

1. their ability to understand essential biological, chemical, and physical processes.

2. their ability to understand different cultural perspectives on the environment.

3. their ability to understand the policy, economic, and social implications of many environmental issues.

4. that they have developed skills of analysis necessary to understand and predict the consequences of human actions on the physical, biological, and cultural world.

5. their ability to examine and understand the requirements needed to achieve environmental conservation for a sustainable society.

6. that they have developed writing, speaking, and electronic communication skills needed to communicate with the public and professionals concerning the environmental sciences.

Assessment to date

No assessment to date because the learning outcomes above were created for the new ENVS curriculum just taking effect Fall 2008. Prior to the new curriculum, assessment was not done because the ENVS program had only two ENVS prefix courses (i.e. only two courses unique to the major, and students only took one or the other), plus we knew we were about to replace the curriculum with an entirely new one.

In the new curriculum there now exists a sequence of ENVS-prefix courses at all grade levels; these afford us the opportunity to assess the learning outcomes listed above, and plans are underway to do that beginning this year.

We have mapped both the HSU and the ENVS learning outcomes onto our ENVS-prefix courses. We are developing an assessment plan to begin in 2008-09.