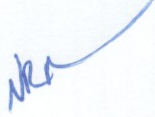




TO: Council on Academic Affairs

FROM: Nancy Reynolds, Chair, Subcommittee A 

RE: School of Environment and Natural Resources Proposal

DATE: August 7, 2007

Subcommittee A reviewed a proposal from the School of Environment and Natural Resources to divide the current Human Dimensions major program into two majors: (1) Environmental Policy and Management and, (2) Parks, Recreation, and Tourism. Subcommittee A discussed the proposal and submitted a set of questions to the School of Environment and Natural Resources. The written responses to the questions are attached.

Subcommittee A recommends approval of the proposal.

To: Nancy R. Reynolds, Chair
Subcommittee A – Council of Academic Affairs

From: Mark E. Giese, SENR Academic Administrative Officer
School of Environment and Natural Resources

Subject: Response to additional questions for the proposed majors:
- Environmental Policy and Management (EPM)
- Parks, Recreation and Tourism (PRT)

Date: July 13, 2007

Attached are responses to the questions from Subcommittee A regarding the proposal to replace our current undergraduate major, Human Dimensions in Natural Resources, with the following two majors:

- 1) Environmental Policy and Management
- 2) Parks, Recreation and Tourism

Much credit is due Dr. Neil Andrew and Dr. Tom Koontz for assisting with this curriculum revision on behalf of the School of Environment and Natural Resources. They have reviewed our curriculum prospectus for the two proposed majors submitted last year and have helped provide responses to the series of questions that your committee raised during Spring Quarter. I have also contributed some editorial changes and comments as I have worked to merge their thoughts, comments and references with those of the broader SENR faculty.

We are excited that this curriculum revision is now moving forward for review, and we are hopeful that we may be able to have these majors in place for the start of this next academic year.

Thank you for your attention to these proposed academic program changes. We look forward to hearing back from the Council of Academic Affairs at its earliest possible convenience.

Thank you!

How will the curriculum and time to graduation estimates be affected by impending changes to the GEC? Will students have difficulty meeting the major requirements? Are these courses offered regularly?

A reduction in hours to graduation for the Bachelor of Science Degree was anticipated when the majors were originally proposed. The recent reduction in credit hours to 181 will be met by the following changes to our curriculum: (1) reduction in the GEC history requirement from 10 credit hours to 5 credit hours; (2) reduction in the Free Elective component of our EPM and PRT majors from 20 to 15 hours. These changes will make it easier for students to complete the EPM and PRT majors. All of the School's courses required in the majors are offered regularly -- one or more times per academic year.

What was the input from students regarding the proposed changes and how was their input elicited?

The proposed revisions originated from student concerns about some components of the existing curriculum. Current and former students gave constructive feedback regarding the relevance of coursework to their academic and professional pursuits. They helped to shape the proposed curriculum structure for the two indicated majors. As the proposed new curriculum was being developed, student input was solicited through faculty queries of advisees as well as general meetings called for students to dialogue with faculty, staff, and administrators regarding the proposed changes. When presented with the existing and proposed new majors, most incoming students have indicated a preference for the new curricula. In addition, many current students have expressed a desire to switch from the existing major.

Contemporary student input was solicited throughout the 2004-2007 academic years. This feedback went beyond the informal discussions noted above and in Appendix E of the prospectus. In addition to student forums during Spring Quarter 2005, continuing dialogue with student organizations has been undertaken using a similar format. More importantly, a career survey course (ENR 119.01) has been offered twice (Spring Quarter, 2006 and Winter Quarter, 2007) in which the proposed programs have served as the course outline. All students in these courses were supportive of the titles, structures and the specialized career tracks associated with the proposed new majors.

SENR alumni and stakeholders have close ties and interactions with our students through alumni activities and internship opportunities. Alumni and other stakeholder support for the proposed program changes has been strong. This support is articulated on page 18 of the prospectus.

Among the stated objectives for the Parks, Recreation, and Tourism Major are "to understand public land management at all levels of government for parks, recreation, and tourism." Where do students acquire the government content to meet this objective?

Course material centered on governmental aspects of public land management is covered in a number of required courses. ENR 119.01 exposes students to career opportunities in parks, recreation, and tourism organizations at the federal, state, and local levels. ENR 203 covers issues surrounding interactions between nature and society, including federal, state, and local government efforts to influence natural resource use and, conversely, citizen efforts to influence government policy at these levels. In ENR 400, students learn about federal, state, local, and international laws, policies, and policy making. In addition, a 300 level social science course is included in both the PRT and EPM majors with political science courses being the preferred choices. The ENR 545 course is a foundation for the advanced level major courses. In ENR 545, students learn about administrative functions of government agencies at the federal (e.g., National Park Service), state (e.g., Ohio State Parks), and local levels (e.g., Columbus Parks Department and Columbus area Metroparks). This course targets state and national land management agencies and programs. ENR 640 and 641 feature a site planning process utilizing a local or state agency project. There are three additional program components that reinforce this objective. One is the capstone course, ENR 606.01, which requires a comprehensive integration of relevant factors, both public and private, for any appropriate level of government. In ENR 606.01, students participate in decision making regarding natural resource issues touching on local, state, and federal laws, policies, and procedures. This topic is also addressed in ENR 642.

Finally, students select additional courses in SENR or related disciplines to customize their curricula, and faculty advisors encourage them to take courses that will best prepare them to meet prospective career opportunities with federal, state and local agencies as well as with private and non-profit organizations. A third supplemental reinforcement for this objective is the seasonal employment and internship program supervised by SENR. This opportunity provides grounding in the broad scope of PRT and EPM at all levels of government. Given the myriad of policies and complex issues for natural resources and the Environment, it is virtually impossible not to address multiple levels of government in the courses and program opportunities within these two majors.

Majors at other universities commensurate to your Parks, Recreation, and Tourism Major are generally named as Parks, Recreation, and Tourism Administration or Management. Why was this term dropped from the name of this major?

You are correct that commensurate majors at other universities are often identified as Parks, Recreation and Tourism Administration or Parks and Recreation Management or Parks, Recreation and Tourism Resources. It is noted that this was an earlier title of this major at Ohio State and was used to identify this option area in the current Human Dimensions in Natural Resources major. (See p. 19, paragraph 1 of prospectus).

Management is one of the cornerstones that define most majors in the School of Environment and Natural Resources. Some level of management or administration is almost always involved in our intervention in the Environment, our utilization of natural resources, or our training of the people who use those resources. The concepts of

management and administration are embedded in the framework of the proposed PRT and EPM majors. The SENR Faculty support the name change for this major as a more inclusive, yet concise version that quickly and clearly indicates the focus of our program and what it may encompass. It also provides a signal that we have substantially changed the content of the curriculum from the current or past curricula, which have been titled "Parks, Recreation, and Tourism Administration."

This language is also compatible and consistent with what we have done with other SENR major revisions (i.e. the "Forestry, Fisheries and Wildlife" major which represents disciplines related to forest, fisheries, and wildlife management). The concepts of management or administration will not be overlooked or lost to prospective or current students. These components are assumed to be an integral part of the major by the students, alumni and stakeholders we have queried. Shortening the PRT major title makes it more conducive to effective marketing and much easier to incorporate into web and printed materials (i.e. admissions brochures, college recruitment materials, School webpage etc.). It is a simpler title, but is still very descriptive of the major.

The primary differentiation between the Environment Policy & Management Major and the Parks, Recreation, and Tourism Major are the electives in ENR or a related discipline. This involves considerable leeway. To what extent will students be provided with explicit guidance? How will students know what courses need to be taken to be eligible for various certifications available to graduates of the program?

The proposed PRT major requires the same number of additional specialization courses in ENR or related disciplines as we currently have in the HDNR option of Parks, Recreation, and Tourism Administration. The EPM specialization maintains a similar design, but also requires a student to build a foundation in one of four ENR focus areas (i.e. forestry, soils, water or wildlife).

In our new curriculum guidelines, we have developed lists of courses to support specific tracks and to give explicit guidance to students interested in particular career paths. Some examples in the PRT major include community recreation leadership and management, eco-tourism and adventure program planning; environmental education and interpretation; park and recreation law enforcement; recreation resource management; and recreation resource planning. Each of these career tracks includes a list of relevant courses. Appendix B of the prospectus outlines a series of templates for specialized career tracks in PRT and EPM. These lists include indications of which courses are relevant for particular certifications, and the faculty advisors will provide interested students with more details.

As an example, the PRT major is designed to prepare mid-level managers and program or agency administrators for the 5-10-year milestone of their careers. The specialized career tracks are explicit course structures for individual interests and entry level professional positions. This is very explicit guidance. The primary decisions for a student to make are to major in PRT and to select the most appropriate specialized career track. Also, there are currently four embedded certifications available to the PRT major that can be

incorporated into their degree program. These certification areas include environmental interpretation certification; National Park Service Ranger Training certification; Ohio Peace Officer Basics certification; and Wildland Fire Fighting certification. Specific courses for each certification are readily identifiable and promoted to students with that interest. (See Appendix B for example). Individual students are encouraged to obtain these available certifications when appropriate.

Additional, certifications as parks and recreation professionals can also be obtained through the Ohio Parks and Recreation Association (OPRA) and the National Recreation and Parks Association (NRPA). The curriculum components built into the PRT major satisfy elements required for professional certification from these professional societies. Furthermore, there is room to expand into other certification paths as the PRT major becomes more firmly re-established and recognized nationally.

The EPM major also has a set of its own career tracks and listings for possible specialization courses (See Appendix B) that would be selected in consultation between the student and the faculty advisor. Environmental law, resource policy, environmental risk assessment, and environmental communication and decision-making are becoming popular career tracks and research areas for ENR graduates.

Although there are shared courses and crossovers between the two proposed ENR social science majors, there are unique student markets and career directions that each of the majors cater to, and they provide students the ability to customize their academic and professional development towards an ENR career that captures their interest.

Among the rationale provided for the program changes are an interest in drawing upon a broader student population. Is an assessment or collection of outcomes data planned?

All our students begin their program under the advisement of our School's professional advising staff, which collects information about student backgrounds and interests. Thus, we have a mechanism in place to monitor the range of students who enroll in our majors. In addition, we track the number of students enrolled in each major. Both data sets will be used to assess the results of our new majors in drawing from a broader student population. The approval of this program would provide an excellent opportunity to track outcomes and compare them with national trends. Such a recommendation will be made to SENR administration for implementation if the majors are approved.

In keeping with your goals, how will the international component of the PRT major be realized?

The international component is fostered through the encouragement of students to study abroad and to participate in study tour opportunities. The 28 credit hours of additional courses in natural resources or related disciplines provide flexibility for students to take

advantage of such opportunities. Study abroad opportunities are emerging and being emphasized more within SENR. This visibility will provide opportunities to enhance the international perspective of this program. Recent study tours for undergraduates in SENR have included Siberia, the Dominican Republic, and Uganda, and we are currently preparing a study tour for Summer Quarter, 2008, to Iceland.

We also have affiliations with the School of Field Studies, the National Outdoor Leadership program, and the Glenn Institute. Students are encouraged to engage these unique and specialized program opportunities and can readily incorporate them into their GEC and major requirements. A listing in the prospectus (page 11) is indicative of the extensive international activity of PRT and EPM faculty. These experiences are integrated into course content and classroom examples.

Another realization of global awareness has been the attraction of international graduate students and/or international study projects for graduate student research to the School. These opportunities have enriched the curriculum and provided additional resources to advance globalization of the program. International perspectives still need more attention and should be systematically nurtured. This realization was included in the prospectus on page 11.

Attention to:

Nancy R. Reynolds, PhD, FAAN
Graduate Studies Committee Chair and
Doctoral Program Director
Ohio State University, CON
1585 Neil Ave.
Columbus, OH 43210

w: 614-292-4449

f: 614-292-7976

Major Areas of Study Since 1999 in the School of Environment and Natural Resources

<u>1999</u>	<u>2000</u>	<u>2003</u>	<u>2007</u>
Environmental Communication, Education And Interpretation	Environmental Science Landscape Option Soil Science Option Waste Management Option Water Option	same	same
Environmental Science			
Fisheries Management	Fisheries and Wildlife Fisheries Option Wildlife Option		
Forestry		Forestry, Fisheries and Wildlife Fisheries Option Forestry & Wildlife Mgt Option Urban Forestry & Wildlife Mgt Option Forest Ecosystem Science & Mgt Option Wildlife & Fisheries Science Option Fisheries Science Option Wildlife Science Option Wildlife & Pre-Vet Med Option	same
Parks, Recreation and Tourism			
Soil Science	Forestry and Urban Forestry Forestry Option Urban Forestry Option		
Urban Forestry	Human Dimensions Ecological Comm and Education Option Integrated Resource Planning Option Parks, Recreation and Tourism Admin Option	Same	Environmental Policy & Mgt Parks, Recreation and Tourism
Wildlife Management			

MAR 7 2007

OFFICE OF ACADEMIC AFFAIRS

Dutta, Lakshmi

From: Brian Winer [winer@pacific.mps.ohio-state.edu]
Sent: Tuesday, February 20, 2007 11:59 AM
To: Smith, Randy
Cc: Dutta, Lakshmi
Subject: Human Dimensions Major

Randy,

I have been looking at the proposal for the Human Dimensions major splitting up. I have found some details that have made me uncomfortable. The two new majors have dramatically scaled back requirements in math and science. I can find no justification for why this is appropriate. Here is what I found:

* Existing Major (I had to go to their website to find this...it was not in the proposal)

Math: (10 Hrs)
150 (Trig & Elem Func)
151 (Calculus I)

Chem: (10 Hrs)
121 (Gen Chem 1)
122 (Gen Chem 2)

* Both New Majors

Math: (4 hrs)
130 or 148 or above

Chem: (10 hrs)

101 (Elem Chem) or
121 (Gen Chem)

102 (Elem Chem) or
121 (Gen Chem)

I believe this represents dramatic reductions in the rigor (especially math) of these majors. As I said I cannot find any justification why the requirements should be relaxed to this extent.

Personally, I have become uncomfortable bringing this forward from Subcomm D. Maybe it would be appropriate to send to subcomm. If you get a chance can you call me at 2-7370 (Lab) or 2-8996 (office)?

-Brian

=====
Prof. Brian L. Winer
Department of Physics
Ohio State University
191 W. Woodruff Ave
Columbus, OH 43210
(614) 292-7370 (Lab)
(614) 292-8996 (Office)



June 14, 2006

Randy Smith
Associate Provost
203 Bricker Hall
190 N. Oval Mall
CAMPUS

Dear Randy:

Attached you find two copies of the document requesting the change in name of the Human Dimensions major within the School of Environment and Natural Resources. As outlined in the document the current Human Dimensions major will be split into two majors titled:

1. Environmental Policy and Management
2. Parks, Recreation and Tourism

The CFAES administrative team is in support of the change. Students, faculty and the general public will be able to better understand the nature of the two new majors with the new names. Human Dimensions does not describe the major to the extent it should. This request is very much in line with our current efforts related to recruitment.

The proposal has moved through the proper approval process in the School. Students, faculty and stakeholders were involved in the development process. Letters of support from associated units are included. I have included a CD so that you also have an electronic version of the request. Ideally the School would like it approved for Autumn 2006. Please let me know if you need anything else. We appreciate your assistance in moving this proposal through the approval process as soon as possible.

Sincerely,

Jill A. Pfister
Assistant Dean, Academic Affairs
College Secretary,
and Honors Director

cc: Mark Giese
Jerry Bigham
L.H. Newcomb

**Final Prospectus for Changing the
Human Dimensions in Natural Resources
Undergraduate Major
School of Environment and Natural Resources**

**Environmental Policy & Management
Parks, Recreation and Tourism**



210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1085

Phone (614) 292-2265
Fax (614) 292-7432
<http://snr.osu.edu>

May 19, 2006

Dr. Jill A. Pfister
Assistant Dean
College of Food, Agricultural, and Environmental Sciences
100 Agricultural Administration Building
2120 Fyffe Road
CAMPUS

Dear Jill,

Enclosed is the Final Prospectus for changing the Human Dimensions in Natural Resources undergraduate major in the School of Environment and Natural Resources.

As outline in this document, the two new majors will be as follows:

- 1) Environmental Policy & Management
- 2) Parks, Recreation and Tourism

In this document, SENR has updated the curriculum templates for these two majors to reflect the change in our new course listings for Autumn Quarter, 2006. As you are aware, all SENR courses, both natural resources and soil science, will be listed under **ENR** (Environment and Natural Resources).

Letters of support and concurrence received for this curriculum revision have also been attached to this document. Overall, response has been favorable for this curriculum change. Minor modifications have been incorporated at the suggestion of concurring academic units.

If you or CAA should have any additional questions regarding this proposal, please feel free to contact me directly. We continue to appreciate your guidance and support through the approval process.

Sincerely,

Mark E. Giese
SENR Academic Administrative Officer



210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1085

Phone (614) 292-2265
Fax (614) 292-7432
<http://snr.osu.edu>

December 7, 2005

Dr. Jill A. Pfister
Assistant Dean
College of Food, Agricultural and Environmental Sciences
100 Agricultural Administration Bldg.
2120 Fyffe Rd.
CAMPUS

Dear Jill:

Enclosed please find a proposal to change our "Human Dimensions in Natural Resources" major that currently includes options in "Ecological Communications and Education," "Integrated Resource Policy and Planning," and "Parks, Recreation and Tourism Administration." We are, in essence, asking to revise and reconstitute two previous undergraduate majors of the School under the titles of "Environmental Policy and Management" and "Parks, Recreation and Tourism."

The most significant change from our existing Human Dimensions major involves a reduced emphasis on environmental education and communication that is necessitated by a loss of faculty expertise in this area. We will attempt to maintain essential components of communication and education in the environmental interpretation aspect of Parks, Recreation and Tourism. In addition to this curriculum re-organization, we are asking that our existing math and chemistry requirements be changed to better match the needs of our social science students.

We believe the proposed majors, if approved, will help students more easily identify and prepare for social science based career opportunities related to environmental and natural resource issues. We also believe these benefits can be achieved without significant changes in allocated internal resources in the form of facilities, faculty, or support services.

If you have any questions regarding the proposal, please feel free to contact Mark Giese, Andrea Trachsel, or Don Eckert. As always, we appreciate your advice and assistance in helping us advance our resident instruction programs.

Sincerely,

A handwritten signature in cursive script that reads "Jerry M. Bigham".

Jerry M. Bigham
Professor and Director

Cc: N. Andrew
M. Giese
D. Eckert

5

X-ASG-Debug-ID: 1138800669-18888-216-0

X-Barracuda-URL: <http://140.254.85.28:8000/cgi-bin/mark.cgi>

Date: Wed, 01 Feb 2006 08:30:33 -0500

From: "Smith, Randy" <Smith.70@osu.edu>

X-ASG-Orig-Subj: Human Dimensions in Natural Resources

Subject: Human Dimensions in Natural Resources

To: "Pfister, Jill" <pfister.1@CFAESMAIL.CFAES.OHIO-STATE.EDU>

Cc: "Moser, Bobby" <moser.2@osu.edu>, "Newcomb, L.H. (.1)" <Newcomb.1@osu.edu>,
JERRY BIGHAM <bigham.1@osu.edu>, giese.1@osu.edu

Thread-topic: Human Dimensions in Natural Resources

Thread-index: AcYnM62aGu7AmkT4TniolU3urf80SQ==

X-MIMEDefang-Relay-f7c2c66dfd9166a30af01c9df978af5007b8be73: 128.146.102.6

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

X-Spam-Score: 0.60 () [Tag at 5.00] FROM_ENDS_IN_NUMS,HTML_40_50,HTML_MESSAGE

X-CanItPRO-Stream: giese.1 redirected to 11_tagonly_no_subject

X-Scanned-By: CanIt (www.roaringpenguin.com) on 128.146.216.84

X-Authentication-warning: defang4.net.ohio-state.edu: defang set sender to
<Smith.70@osu.edu> using -f

X-Virus-Scanned: by Barracuda Spam Firewall at ag.ohio-state.edu

X-Barracuda-Spam-Score: 0.00

X-Barracuda-Spam-Status: No, SCORE=0.00 using global scores of TAG_LEVEL=2.5

QUARANTINE_LEVEL=3.3 KILL_LEVEL=4.5 tests=

X-Barracuda-Spam-Report: Code version 3.02, rules version 3.0.8126

Rule breakdown below pts rule name description

Jill:

I have reviewed the Prospectus from the School of Environment and Natural Resources to change the major in Human Dimensions in Natural resources to two separate majors and have no major issues/concerns. Please feel free to move forward with the formal proposal.

With regard to timing, given that you would like Autumn 2006 implementation, if you can get me the proposal by the end of Winter 2006, the Council on Academic Affairs, given current workload assignments, should be able to turn to this during Spring Quarter 2006 with action no later than Summer 2006.

Thanks - as usual - for the thorough work that went into this Prospectus.

Randy

W. Randy Smith
Vice Provost

Final Prospectus for Changing the Human Dimensions in Natural Resources Undergraduate Major School of Environment and Natural Resources

Titles: (1) Environmental Policy & Management
(2) Parks, Recreation, and Tourism

Rationale: This change will modify and rename aspects of our existing human dimensions major. The two new majors are proposed to (1) increase accessibility of the natural resources major to a broader array of students; (2) better prepare students for careers in the human aspects of natural resource management and environmental issues; (3) better serve students who wish to be informed citizens on natural resource and environmental issues; (4) emphasize the social science aspects to a greater degree than the current curriculum; and (5) enhance disciplinary depth and serve the professional endeavors of stakeholders at the state, regional and national levels of operation.

Relationship of the proposed major(s) to the mission of the department/college:

The “ecological paradigm” of the College of Food, Agricultural, and Environmental Sciences (CFAES) has guided by the School of Natural Resources (SNR) since its inception. In particular, the “social responsibility” and “environmental compatibility” elements are fundamental to the proposed curriculum. As of November, 2005, the Ohio State University Board of Trustees gave approval for the School of Natural Resources to change its name. The new school name is the *School of Environment and Natural Resources (SENR)*. This name change better reflects the mission and institutional role that the School continues to serve. The mission of the SENR in part is “to enhance and impart knowledge of natural and social systems and their essential relationships in the context of natural resource use and management.” The proposed curriculum will serve to further this mission.

Proposed implementation date: Autumn Quarter, 2006

Departmental responsibility and support:

The *School of Environment and Natural Resources (SENR)* will be responsible for the Environmental Policy and Management (EPM) major, and the Parks, Recreation, and Tourism (PRT) major. The School’s current support of the Human Dimensions major (being phased out) will be redirected and used to support these two new majors.

Description of the major(s):

The Environmental Policy & Management major represents social sciences applied to addressing environmental and natural resource problems. The major draws on a variety of social science disciplines and fields, including public administration, decision making, planning, communication, risk management, economics, policy, and law. Students also must select at least one complementary intermediate level course in political science, psychology, or sociology. The major also requires students to gain depth in one of the School's emphasized natural resource fields, either soils, water, forests, or wildlife.

The Parks, Recreation and Tourism major represents a range of fields focused on the practical management and administration of parks, recreation, and tourism. Given its more directly applied focus, the major will draw on concepts from business, economics, systems management, education, communications, and leisure sciences.

Numbers and sources of students:

The proposed majors will draw upon the same pool of students who are currently attracted to the Human Dimensions major in the School of Environment and Natural Resources. Recent enrollments in Human Dimensions have totaled about 48 students. In addition, by emphasizing social sciences to a greater degree, and chemistry and math to a lesser degree, than the existing Human Dimension curriculum, the proposed majors will draw upon the broader student population at Ohio State, and beyond, who are interested in social science aspects of the environment. This last point is worth emphasizing. The School of Environment and Natural Resources currently competes with Environmental Studies programs offered at other institutions within Ohio (e.g., Denison University, The College of Wooster). Many students who would otherwise be drawn to The Ohio State University are enrolling in these other programs, which have more of a social science emphasis, despite the fact that we have a capable array of faculty with natural resources social science backgrounds. Enrollment trends indicate an increase in interest and student enrollment in fields related to the natural resources social sciences both regionally and nationally. (See Enrollment Trends Graphics in Appendix A of this document) There exists a market of students completing related two year Associate degree programs across the State of Ohio interested in completing a four year degree at the Ohio State University through the Bachelor of Science in Natural Resources undergraduate programs. The EPM and PRT majors will meet this specific student market demand most effectively.

Availability of Environmental Policy and Management major and Parks, Recreation, and Tourism major at other leading universities:

Environmental Policy and Management Major

EPM majors and specializations are offered at five of the eleven Big Ten Universities:

University of Illinois at Champaign-Urbana: B.S. in Natural Resources and Environmental Sciences, Human Dimensions Option, Dept of Natural Resources and Environmental Sciences;

Indiana University at Bloomington: B.S. in Public Affairs, major in Environmental Management from the School of Public and Environmental Affairs;

University of Michigan: B.S. or A.B. in "Program in the Environment," specialization in Environmental Social Science, from the School of Natural Resources and the Environment and College of Literature, Science, and the Arts;

Michigan State University: major in Environmental Economics and Policy, College of Agriculture and Natural Resources;

University of Minnesota: B.S. in Natural Resources, major in Environment and Natural Resources, concentration in Planning, Policy, and Law.

Nationally prominent undergraduate programs related to environmental policy and management are located at several universities, which are described below:

Duke University, Nichols School of the Environment and Earth Sciences, B.A. major in Environmental Sciences and Policy: "The A.B. degree is designed for students interested in the interdisciplinary study of environmental issues. The major permits students to combine studies in natural sciences and engineering with courses in social sciences and humanities to develop particular focus areas or themes relevant to students' individual interests. Solving the world's environmental problems requires an understanding not only of ecological systems but also of the cultural, social, economic, and political forces that act on those systems. The A. B. degree in Environmental Science and Policy provides students with this background."

University of Michigan, B.S. or A.B. in "Program in the Environment," specialization in Environmental Social Science, from the School of Natural Resources and the Environment and College of Literature, Science, and the Arts: "Our prerequisite and core requirements expose you to the natural and social sciences and the humanities, ensuring that you have the analytical skills and vocabulary to talk across disciplines."

University of California at Berkeley, College of Natural Resources, Dept. of Environmental Science, Policy, and Management; Major in Conservation and Resource Studies: "The Conservation and Resource Studies (CRS) major is an interdisciplinary program designed for those who are interested in environmental issues and areas of interaction among natural resources, population, energy, technology, societal institutions, and cultural values. Students draw on the course offerings of the entire campus and appropriate community resources in the development of individual programs of study."

University of California at Davis, Dept. of Environmental Science and Policy, B.S. major in Environmental Policy Analysis and Planning: "The EPAP curriculum combines a background in the natural sciences with more advanced work in reasoning and analysis through classes such as economics, political science, statistics, law, and ethical reasoning. . . Students will choose an area of specialization that allows them to gain additional knowledge and skills in a particular policy field and provide a focus for applying the general knowledge obtained in the core classes. . . The areas are advanced policy analysis, city & regional planning, resource management, energy policy, transportation planning, and water quality planning."

Indiana University, B.S. in Public Affairs, major in Environmental Management from the School of Public and Environmental Affairs: "Students with a Bachelor of Science in Public Affairs degree can continue their education in areas such as law, planning, public affairs, environmental science, or business administration. For those who choose immediate employment, our program is flexible enough to provide the necessary background to begin a career in either the public or the private sector."

Harvard University, Faculty of Arts and Sciences, Concentration in Environmental Science and Public Policy: "The concentration in Environmental Science and Public Policy is designed to provide a multi-disciplinary introduction to current problems of the environment. It is founded on the premise that the ability to form rational judgments concerning many of the complex challenges confronting society today involving the environment requires an understanding of the underlying scientific and technical issues and an appreciation for the relevant economic, political, legal, historical and ethical dimensions."

University of Wisconsin at Green Bay, Dept. of Public and Environmental Affairs, B.S. major in Environmental Policy and Planning: "The Environmental studies program [is] based in the social sciences. It is designed to prepare students for a variety of challenging professions involving the planning, analysis, design, and administration of policies and programs dealing with the natural and human-made environment. This interdisciplinary major is also suitable preparation for further study in a wide range of graduate programs, including environmental studies, public policy, public administration, law, urban and regional planning, and related fields. Through this major students develop knowledge and skills in planning and decision making, public policy, political and economic systems, and the environmental sciences, and acquire the analytic capacities for participation in those processes which will shape environmental quality in the future."

Parks, Recreation, and Tourism Major

PRT majors are offered in some form at five of the eleven Big Ten Universities.

Indiana University: B.S. in Outdoor Recreation and Resource Management; Park and Recreation Management; Tourism Management; School of Health, Physical Education and Recreation;

University of Minnesota: B.S. in Recreation Resource Management, College of Natural Resources;

Michigan State University: B.S. major in Park, Recreation, and Tourism Resources, College of Agriculture and Natural Resources;

Penn State University: B.S. in Recreation, Park, and Tourism Management, Dept. of Recreation, Parks, and Tourism Management;

University of Wisconsin: B.S. in Recreation Resources Management, Forestry Ecology and Management.

Nationally prominent PRT undergraduate programs are located at Colorado State University, Texas A & M University, and Clemson University.

Colorado State University: Department of Natural Resources Recreation and Tourism, College of Natural Resources, B.S. in Natural Resources Recreation and Tourism: “The concentrations within our major are similar in their first two years in providing a quality array of courses in communications, arts and humanities, and natural and social sciences. During the junior and senior years, you focus more on specific departmental courses. . . Sustainable economic development, environmental literacy, physical and mental well-being, revitalization of rural America, development in third world nations, and even world peace are important roles for the recreation and tourism industry.”

Texas A & M University: Department of Recreation, Park and Tourism Sciences: “Students study both the social and life sciences in order to understand and manage the use of natural and cultural resources for recreation and tourism. The program emphasizes the application of science to recreation, park and tourism development and management. Communication and business skills are also emphasized in the program because of their fundamental importance to the administration of recreation, park and tourism facilities and resources.”

Clemson University: Department of Parks, Recreation, and Tourism Management, College of Health, Education, and Human Development: “The undergraduate curriculum in Parks, Recreation and Tourism Management prepares students for a variety of careers in leisure service agencies. It is designed to provide for a broad exposure to the social, physical and biological sciences. Basic knowledge is provided in the management of leisure service resources and programs. Flexibility within the curriculum is achieved by

permitting each student to select course work from among several emphasis areas that include Community Leisure Services, Recreation Resource Management, Therapeutic Recreation, and Travel and Tourism Management. The latitude in selection permits maximum accommodation of the individual student's interests and professional career objectives.”

Impact of the new majors on facilities, faculty, and support services:

We designed the two new majors with attention to existing facilities, faculty, and support services. The new curricula were developed with existing courses. For the EPM curriculum, we are taking advantage of several new courses that did not exist at the time of the Human Dimensions curriculum development. For the PRT curriculum, we updated and revised the suggested course list based on courses currently on the books in Natural Resources and other departments.

Recent faculty-to-student ratios in SENR courses taken by Human Dimensions major indicate capacity to accommodate additional students into existing courses, within current commitments to resident instruction by incumbent faculty. Since social science courses typically are not lab or field-based, facility requirements are minimal. Support services in place can accommodate additional students, for example advising staff and career services resources. If the enrollments in these two new majors increase considerably, then the additional resources generated eventually will be used to increase support services, as needed.

Faculty:

Neil Andrew – Assistant Professor in Park System Management, Recreation Program Policy and Administration, Tourism System Development, and Natural Resources Administration.

Joe Arvai – Assistant Professor in Natural Resources Human Dimensions with research interests in Environmental Judgment and Decision Making, Risk assessment and communication, choice and preference behavior, decision quality, tradeoff analysis, stakeholder involvement, adaptive management.

James Christensen – Associate Professor in Natural Resources Human Dimensions with research interests in Measurement in Natural Resources and Statistical Graphing.

Robert W. Douglass – Professor in Natural Resources Human Dimensions with research interests in Parks, Recreation, and Tourism Administration; Natural Resources-based planning; and Policy and Urban Ecosystem Management.

Craig Davis – Professor in Natural Sciences with research interests in Ecology and management of wetlands; and environmental conflict resolution; and Environmental security work focused on the importance of healthy ecosystems to personal, economic, and national security.

Earl Epstein – Professor in Natural Sciences and Law with research interests in Institutional Development of Geographic and Land Information Systems (GIS/LIS), Impacts of GIS/LIS on land management, Environmental Law and Policy, Systems of Property in Land.

Joe Heimlich – Associate Professor in Natural Resources Human Dimensions with research interests in Philosophy of environmental education, Transfer of learning perceptions of issues - values, beliefs and attitudes, Community understanding of environmental issues, Elements of the teaching/learning exchange.

John Heywood – Associate Professor in Natural Resources Human Dimensions with research interests in the Human dimensions of natural resources and ecosystem management; Behavioral conventions, social norms, game theory, social dilemmas; Leisure social groups and social behavior; Recreation resource program development and planning; Experience based park design.

Tom Koontz – Associate Professor in Environmental and Natural Resources Policy with research interests in collaborative environmental management; public lands policy, forest policy, ecosystem management, land use policy, social aspects of watershed management, and institutional analysis.

Gary Mullins - Professor in Natural Resources Human Dimensions with research interests in Environmental information transfer, particularly related to ecosystem and critical resource management issues; Recreation use patterns; Planning, evaluation, and marketing procedures in interpretation and informal environmental education; Marketing, evaluation, and training procedures for environmental information personnel.

Proposal to Establish Undergraduate Majors

- (1) Environmental Policy and Management**
- (2) Parks, Recreation, and Tourism**

I. College Support

This proposal is accompanied by a letter from the College of Food, Agricultural and Environmental Sciences, which describes college resources committed to the program and the relationship of the new majors to other priorities of the college.

II. General Information

1. Name of the proposed majors:

- (1) Environmental Policy and Management**
- (2) Parks, Recreation, and Tourism**

2. Degree title: Bachelor of Science in Natural Resources

3. Proposed implementation date: Autumn Quarter 2006

4. Academic unit responsible for managing the degree program:

School of Environment and Natural Resources

III. Rationale/Goals/Objectives

Rationale/Purpose of the Program

The purpose of the two proposed majors is to provide undergraduate students with an improved understanding of environmental and natural resource issues within the state of Ohio, the United States, and elsewhere. This base will serve as a foundation for many undergraduates who are seeking either careers in this field or placement within related programs for graduate study. For other students, the major will provide in-depth knowledge of salient topics and skills to understand future environmental and natural resource challenges. To this end, the proposed majors emphasize two areas of concentration:

- Environmental Policy and Management
- Parks, Recreation, and Tourism.

The Environmental Policy and Management (EPM) Major focuses on the development and maintenance of long-term natural resource use and environmental quality in the face of increasing human demands on resources and the environment. This interdisciplinary major addresses interactions of the public and private sectors in making resource management decisions, stressing policy formulation, implementation, and impact assessment.

The Parks, Recreation, and Tourism (PRT) Major emphasizes one of the most important industries in Ohio, regionally, nationally and internationally. Matching people's demands for recreation and tourism opportunities and experiences with the supply of park, recreation, and tourism resources is a challenge. This major prepares students to work in the public, private, and non-profit sectors and manage all types of park systems from theme parks to national, local and city parks, state parks, metro parks and campgrounds. Some students will emphasize administration of outdoor adventure and urban youth programs, as well as those that provide hospitality and tourist services.

6. General and Specific Educational Goals and Objectives

One of the fundamental goals of education regarding the environment and natural resources is to equip students with the skills to make more informed and thoughtful decisions about environmental issues. Many examples of environmental and science education curricula work to address this goal by providing students with up-to-date information about a myriad of environmental issues from a variety of natural science disciplines. An emphasis on natural science information, however, does not help to overcome many of the barriers to an improved understanding of environmental and natural resource problems by itself. Improving policies, decisions, plans and practices also requires a balance with the social sciences for the most effective administration of natural resources. In order to equip students to make informed decisions about the environment and natural resources, instructors must also work to incorporate lessons about policy and decision-making, and management planning as part of a broader science-based curriculum.

To this end, the specific educational objectives of the Environmental Policy and Management Major include the following:

- Helping students to understand common impediments to thoughtful policy and decision making for the environment and natural resources.
- Identifying the varied and often conflicting objectives that guide choices about environmental and natural resource problems.
- Facilitating student comprehension of the interface between science and policy, and between natural and man-made systems.
- Providing students with the skills to make informed choices about environmental and natural resource management.

The specific education objectives of the Parks, Recreation, and Tourism Major include the following:

- To understand public land management systems at all levels of government for parks, recreation and tourism.
- To comprehend and blend complementary private tourism destinations with public systems for service centers.
- To recognize and develop planning skills for effective and efficient administration.
- To provide enhanced preparations for recreation program management and supervision.

- To develop leadership knowledge and skills for all components of a comprehensive park, recreation and tourism administration pattern.
- To facilitate an outstanding student experience and motivate high achievement towards advanced study.

Diversity as a college goal and indicator of success includes a variety of employers seeking SENR graduates, and alumni who are recognized professionals and leaders. There are 17 SENR graduates serving as park managers for 74 state parks in Ohio. A host of other alumni are in additional low and mid-level positions, not only for state parks, but also community park/recreation departments, metro-parks (32 systems) and the National Park Service. Other graduates serve as planning consultants and managers for outdoor education centers, golf courses, non-government organizations, and other state or federal agencies beyond Ohio. Additional examples of successful graduates include a National forest supervisor in Virginia and a National wildlife refuge assistant manager in Illinois. The wilderness program director for the Bureau of Land Management is an SENR alumnus. The Chief of Ohio State Parks (gold medalist recipient for National Recreation and Parks Association in 1998) is an SNR graduate. Five of the senior administrators in the central office of the Ohio Department of Natural Resources, Division of Parks are graduates of the School of Natural Resources parks, recreation and tourism administration program. PRT alumni also include two metro park directors (Franklin and Lorain Counties), two assistant directors, multiple reservation managers, and approximately a dozen senior administrators. At one time, Colorado parks actively recruited SNR interns, with a number of them going on to successful careers in state and county park systems.

The international level has not been nurtured to the same extent as state, local or national levels by this program. Great potential awaits with these job markets as well. There has been activity and direct contact in Australia, Germany, France, Great Britain, Belize, Hungary, New Zealand, South Korea, Slovakia and Canada. These contacts are all indicative of opportunities that could be developed substantially in the international parks, recreation and tourism arena.

7. Unique characteristics and resources:

The School of Environment and Natural Resources is the only institution in Ohio that offers the Bachelors of Science degree in natural resources. The School has offered this degree since its inception in 1969. The School is effectively positioned to make use of the instructional expertise of faculty from various academic units of The Ohio State University. The School has the faculty expertise, infrastructure, and external stakeholder support to offer academic programming and extra-curricular experiences that prepare graduates for successful environmental and natural resource careers in public service, non-profit organizations, or the private sector.

8. Benefits for Students, the Institutions, the Region and the State

a. **Benefits for students** - Students will gain access to a focused but interdisciplinary curriculum and educational opportunities centered on the environment and natural resources. Prospective students will more readily discover social science based program opportunities related to environmental and natural resource issues and specific professional positions with high profile management programs.

b. **Benefits for the institution** - The Ohio State University will benefit in its ability to attract high quality students to study critical and emerging issues related to the Environment and natural resources. These academic programs will enable the university to better serve a significant group of stakeholders.

c. **Benefits for the region or state** - As environmental concerns continue to demand complex choices and policies, the region and state will benefit from having informed citizens able to contribute to solving environmental and natural resource problems. (See attached graphs) More significantly, preparation of young professionals for a multitude of land and program management systems will contribute to providing solutions and leadership as a generation of current professionals move towards retirement.

9. Similar majors offered in public and private institutions in Ohio and the U.S.

EPM majors and specializations are offered at five of the eleven Big Ten Universities:

University of Illinois at Champaign-Urbana: B.S. in Natural Resources and Environmental Sciences, Human Dimensions Option, Dept of Natural Resources and Environmental Sciences;

Indiana University at Bloomington: B.S. in Public Affairs, major in Environmental Management from the School of Public and Environmental Affairs;

University of Michigan: B.S. or A.B. in "Program in the Environment," specialization in Environmental Social Science, from the School of Natural Resources and the Environment and College of Literature, Science, and the Arts;

Michigan State University: major in Environmental Economics and Policy, College of Agriculture and Natural Resources;

University of Minnesota: B.S. in Natural Resources, major in Environment and Natural Resources, concentration in Planning, Policy, and Law.

Nationally prominent undergraduate programs related to environmental policy and management are located at several universities, which are described below

Duke University, Nichols School of the Environment and Earth Sciences, B.A. major in Environmental Sciences and Policy: “The A.B. degree is designed for students interested in the interdisciplinary study of environmental issues. The major permits students to combine studies in natural sciences and engineering with courses in social sciences and humanities to develop particular focus areas or themes relevant to students’ individual interests. Solving the world’s environmental problems requires an understanding not only of ecological systems but also of the cultural, social, economic, and political forces that act on those systems. The A. B. degree in Environmental Science and Policy provides students with this background.

University of Michigan, B.S. or A.B. in “Program in the Environment,” specialization in Environmental Social Science, from the School of Natural Resources and the Environment and College of Literature, Science, and the Arts: “Our prerequisite and core requirements expose you to the natural and social sciences and the humanities, ensuring that you have the analytical skills and vocabulary to talk across disciplines.”

University of California at Berkeley, College of Natural Resources, Dept. of Environmental Science, Policy, and Management; Major in Conservation and Resource Studies: “The Conservation and Resource Studies (CRS) major is an interdisciplinary program designed for those who are interested in environmental issues and areas of interaction among natural resources, population, energy, technology, societal institutions, and cultural values. Students draw on the course offerings of the entire campus and appropriate community resources in the development of individual programs of study.”

University of California at Davis, Dept. of Environmental Science and Policy, B.S. major in Environmental Policy Analysis and Planning: “The EPAP curriculum combines a background in the natural sciences with more advanced work in reasoning and analysis through classes such as economics, political science, statistics, law, and ethical reasoning. . . Students will choose an area of specialization that allows them to gain additional knowledge and skills in a particular policy field and provide a focus for applying the general knowledge obtained in the core classes. . . The areas are advanced policy analysis, city & regional planning, resource management, energy policy, transportation planning, and water quality planning.”

Indiana University, B.S. in Public Affairs, major in Environmental Management from the School of Public and Environmental Affairs: “Students with a Bachelor of Science in Public Affairs degree can continue their education in areas such as law, planning, public affairs, environmental science, or business administration. For those who choose immediate employment, our program is flexible enough to provide the necessary background to begin a career in either the public or the private sector.”

Harvard University, Faculty of Arts and Sciences, Concentration in Environmental Science and Public Policy: “The concentration in Environmental Science and Public Policy is designed to provide a multi-disciplinary introduction to current problems of the environment. It is founded on the premise that the ability to form rational judgments concerning many of the complex challenges confronting society today involving the

environment requires both an understanding of the underlying scientific and technical issues and an appreciation for the relevant economic, political, legal, historical and ethical dimensions.”

University of Wisconsin at Green Bay, Dept. of Public and Environmental Affairs, B.S. major in Environmental Policy and Planning: “The Environmental studies program [is] based in the social sciences. It is designed to prepare students for a variety of challenging professions involving the planning, analysis, design, and administration of policies and programs dealing with the natural and human-made environment. This interdisciplinary major is also suitable preparation for further study in a wide range of graduate programs, including environmental studies, public policy, public administration, law, urban and regional planning, and related fields. Through this major, students develop knowledge and skills in planning and decision making, public policy, political and economic systems, and the environmental sciences, and acquire the analytic capacities for participation in those processes which will shape environmental quality in the future.”

PRT majors are offered in some form at five of the eleven Big Ten Universities.

Indiana University: B.S. in Outdoor Recreation and Resource Management; Park and Recreation Management; Tourism Management; School of Health, Physical Education and Recreation.

University of Minnesota: B.S. in Recreation Resource Management, College of Natural Resources

Michigan State University: B.S. major in Park, Recreation, and Tourism Resources, College of Agriculture and Natural Resources

Penn State University: B.S. in Recreation, Park, and Tourism Management, Dept. of Recreation, Parks, and Tourism Management

University of Wisconsin: B.S. in Recreation Resources Management, Forestry Ecology and Management

Nationally prominent PRT undergraduate programs are located at Colorado State University, Texas A & M University, and Clemson University.

Colorado State University: Department of Natural Resources Recreation and Tourism, College of Natural Resources, B.S. in Natural Resources Recreation and Tourism: “The concentrations within our major are similar in their first two years in providing a quality array of courses in communications, arts and humanities, and natural and social sciences. During the junior and senior years, you focus more on specific departmental courses. . . Sustainable economic development, environmental literacy, physical and mental well-being, revitalization of rural America, development in third world nations, and even world peace are important roles for the recreation and tourism industry.”

Texas A & M University: Department of Recreation, Park and Tourism Sciences: “Students study both the social and life sciences in order to understand and manage the use of natural and cultural resources for recreation and tourism. The program emphasizes the application of science to recreation, park and tourism development and management. Communication and business skills are also emphasized in the program because of their fundamental importance to the administration of recreation, park and tourism facilities and resources.”

Clemson University: Department of Parks, Recreation, and Tourism Management, College of Health, Education, and Human Development: “The undergraduate curriculum in Parks, Recreation and Tourism Management prepares students for a variety of careers in leisure service agencies. It is designed to provide for a broad exposure to the social, physical and biological sciences. Basic knowledge is provided in the management of leisure service resources and programs. Flexibility within the curriculum is achieved by permitting each student to select course work from among several emphasis areas that include Community Leisure Services, Recreation Resource Management, Therapeutic Recreation, and Travel and Tourism Management. The latitude in selection permits maximum accommodation of the individual student's interests and professional career objectives.”

10. Enrollment patterns of similar majors in Ohio or in the United States

Refer to the graph (Appendix A): Undergraduate Enrollments in Natural Resources by Field of Study for NAFSC Institutions, 1980-2003.

Analysis of this data indicates that EPM and PRT related fields of study have been the fastest growing fields over the past 15 years. This growth reflects increasing societal recognition of the role of natural resources planning and management. It also reflects a continual growing public demand for more outdoor recreation opportunities and the need for professionals to manage and administrate those activities.

11. Career opportunities and/or opportunities for graduate or professional study available to persons who complete the major

Experience with the current Human Dimensions major, as well as that from similar programs in other universities, indicates the following career and graduate opportunities for graduates of the proposed Environmental Policy and Management major:

- federal, state, and local agencies engaged in environmental quality and regulations and natural resource management;
- non-profit organizations;
- environmental consulting;
- graduate programs in environmental law, public policy, planning, public administration

Graduates in the Parks, Recreation, and Tourism major will be well-positioned for careers in recreation resource planning and management, recreation visitor services, recreation law enforcement, community recreation, or urban forestry/wildlife/golf course management. This program has already demonstrated effective placement of graduates in a variety of agencies and organizations.

Diversity as college goal and indicator of success includes a variety of employers seeking School of Environment and Natural Resources graduates, and alumni who are recognized professionals and leaders. There are 17 SENR alumni serving as park managers for 74 state parks in Ohio. A host of other professionals are in other low and mid-level positions, not only for state parks, but also community park/recreation departments, metro-parks (32 systems) and the National Park Service. Others work with as planning and management consultants for outdoor education centers, golf courses, non-government organizations, and other state or federal agencies beyond Ohio. One graduate is a national forest supervisor in Virginia. Another graduate is an assistant manager for a National Wildlife Refuge in Illinois. The Wilderness Program Director for the United States Department of the Interior, Bureau of Land Management is a SENR graduate. The Division Chief for the Ohio Department of Natural Resources, Division of Parks is a School of Environment and Natural Resources alumnus. It should be noted that the Ohio State Parks were selected in 1998 as a gold medal recipient by the National Recreation and Park Association. Five of the senior administrators in the central office of the ODNR, Division of Parks and Recreation are alumni of the previous Parks, Recreation and Tourism Administration major in the School of Environment and Natural Resources. Parks, Recreation and Tourism alumni also include two Ohio Metro Park directors (Franklin & Lorain Counties), two assistant directors, multiple reservation managers, and approximately a dozen senior administrators. At one time, Colorado actively recruited students from SENR with at least eight are now nearing completion of successful careers.

12. Licensure or certification for which this major will prepare students

Students enrolling in the Parks, Recreation, and Tourism major will have the opportunity to complete certification required for several professional positions. Such certifications include National Association of Interpreters (NAI) Interpreter and Host certification; National Park Service Ranger Training certification and Ohio Peace Officer certification (required for federal, state & metro park law enforcement positions).

The Ohio Parks and Recreation Association and the National Recreation and Parks Association provide certifications for outdoor recreation and parks professionals. Certification is also available through the National Outdoor Leadership School (NOLS). Additional certifications are available to students through various wilderness and outdoor recreation outfitter industries partnered with the OSU School of Environment and Natural

Resources. These and other professional credentials are available to students majoring in Parks, Recreation and Tourism.

IV. Relationship to Other Programs

13. Current SENR programs

The new majors will fit within the programs offered in the School of Environment and Natural Resources, which focus more on natural science aspects and the physical dimension of the environment and natural resources. It will replace the current Human Dimensions in Natural Resources major, currently one of three academic major programs offered by the OSU School of Environment and Natural Resources.

14. Overlap with other programs or departments within the university

Due to its interdisciplinary nature, the School of Environment and Natural Resources includes a diverse array of faculty and complimentary courses that are shared across other programs and departments within the university. What sets our program apart is its focus on the environmental and natural resources arena, around which multiple disciplines and perspectives bring expertise to bear. The two new majors constitute a new arrangement of existing courses, rather than the creation of new courses. They add an additional social science course requirement, which may be fulfilled through a variety of departments including sociology, psychology, and political science.

The most similar program to our two new majors is in the Geography department. The “People, Society, and Environment” concentration in Geography “spans the social and natural sciences to investigate a range of human-environment dynamics, including resource use and management, rural livelihoods, land use/land cover change, conservation, the political economy of nature, environmental history, and food systems of the global north and south.” That concentration was approved after our current Human Dimensions in Natural Resources major had been established, as the Geography department argued the distinct nature of that concentration (especially its explicit focus on spatial relationships) set it apart from our Natural Resources curriculum.

15. Cooperative Agreements with other institutions

The School of Environment and Natural Resources maintains active partnerships with the National Park Service, the Ohio Department of Natural Resources, park systems both in and out of state, the Ohio Environmental Protection Agency, the Ohio Division of Travel & Tourism, and other public and private agencies and industries related to both majors: Environmental Policy & Management and Parks, Recreation & Tourism. Faculty and staff of the School of Environment and Natural Resources provide support and assistance

to the internship programs of these agencies. Additional outreach and extension activities are also done in cooperation with these and other institutions in both formal and informal settings. The OSU School of Environment and Natural Resources also has established cooperative programs and projects with Park Ranger Training programs at Northern Arizona University and the National Ranger Training Institute at Hocking College. Through OSU Extension, SENR Faculty facilitates a leadership development academy for Ohio State Parks.

16. Articulation arrangements with other institutions

The OSU School of Environment and Natural Resources has active, ongoing articulation projects that are moving forward with several two-year Ohio institutions affiliated with Ohio Collegiate AG Educators (OCAGE) consortium. The EPM and PRT majors have been designed to better serve students who desire to continue their education beyond an Associates degree in fields related to natural resources and the environment. Active transfer articulation projects currently exist with both Columbus State Community College's Environmental Health & Safety Technologies program and Hocking College's two-year natural resources programs. This can readily be expanded to serve additional two year institutions across the State of Ohio as well.

17. Use of consultants or advisory committees in the development of the major

Development of the two new majors was conducted in consultation with a number of former students and other stakeholders with an interest in the program. Feedback from members of federal and state natural resource and environmental agencies, as well as non-profit environmental and natural resource organizations, yielded strong support for the proposed majors. In particular, commentators remarked on the need for graduating students to be adept at the human aspects of solving environmental and natural resource issues, drawing on social science and communication knowledge and administrative skills to a greater degree than the current Human Dimensions major provides. While foundational knowledge of natural sciences was viewed as important, these stakeholders commented that there is a growing recognition that more social science training is needed for natural resource professionals. External letters are attached within this document.

18. Similar majors previously submitted for approval

The EPM major and the PRT majors are a reconstitution of previous academic programs which have been continuously offered by the School of Environment and Natural Resources since the 1970's.

The proposed Environmental Policy and Management major had been previously established by SENR as a major. It was previously known as Natural Resources

Development, Sustainable Resource Management, and the Integrated Resource Policy & Planning Option of the Human Dimensions major.

The Parks, Recreation and Tourism major had also been previously known as Parks, Recreation and Tourism Administration until Winter Quarter, 2000 when it was incorporated into the Human Dimensions major as the Parks, Recreation and Tourism Administration Option. This action, in hindsight, reduced the visibility of the academic program and did not best serve the students in this major. This revision will restore the visibility of these majors substantially.

It is well recognized among student, alumni and stakeholders that the re-establishment of these two majors will best serve the students and professionals engaged in these prominent arenas of natural resources management and will clearly identify and re-position the School of Environment and Natural Resources' role in these undergraduate academic programs.

19. Internal and External Sources where students will be drawn from

The proposed new majors will draw from current and prospective students in Human Dimensions, as well from students in other academic units at Ohio State and beyond, who are interested in combining natural and social sciences to understand environmental and natural resource issues.

V. Student Enrollment

20. Anticipated number of students admitted to the major each year

We anticipate that, in addition to the approximately 10 students admitted to the current major each year, the curriculum changes, combined with additional School changes underway to increase visibility and recruiting, will yield an additional 30 students admitted annually. There is a growing demand for majors focused in the environmental studies and outdoor adventure activity arena. There is much interest expressed across campus and from the regional campuses for the development of these natural resources social science academic programs.

VI. Requirements

21. List the courses that constitute the requirements and other components of the major

Requirements for the EPM major are as follows: (*see EPM curriculum sheet*)

Requirements for the PRT major are as follows: (*see PRT curriculum sheet*)

2/3/2006 revision

Environmental Policy & Management

Environmental Policy & Management

COURSE & NUMBER	HRS	✓	COURSE & NUMBER	26	HRS	✓
UNIVERSITY REQUIREMENTS			UNIVERSITY REQUIREMENTS			
FAES 100 (University Survey)	1 Hour		Arts and Humanities		20 Hours	
Writing Skills	15 Hours		History Survey I ¹ ★♦	5		
English 110 or 111 (Composition)	5		History Survey II ¹ ★♦	5		
ENR 367 † or LARCH 367 † (2nd Writing Course)	5*		ENR 367 † ⁴ or LARCH 367 † ⁴	5*		
ENR 567 (3rd Writing Course)	5		Literature ¹ ♦★●	5		
Data Analysis, Quantitative & Logical Skills	9 Hours		Visual/Performing Art ¹ ♦★	5		
ENR 222 (Recommended) or Stat 135 or Stat 145 or H&CS 260 or Animal Science 260	5		Social Sciences		15 Hours	
Math 130 or Math 148 or above	4		AED Econ 200 or Economics 200 (Microeconomics)	5		
			ENR 400 (Nat Res Policy)	5		
Natural Sciences	23 Hours		Third Social Science ♦★●	5		
Chem 101 (Elementary Chemistry I) or Chem 121 (General Chemistry I)	5		Diversity Experiences			
Chem 102 (Elementary Chem II) or Chem 122 (General Chemistry II)	5		International Issues <i>Non-western/Global Focus</i> ¹ ★ A Study Abroad experience may be used toward this requirement with degree unit approval.	5*		
Biology 113 (Energy Transfer & Development)	5		International Issues <i>Western Focus</i> (non-U.S.) ¹ ♦ A Study Abroad experience may be used toward this requirement with degree unit approval.	5*		
Biology 114 (Form, Function, Diversity & Ecology)	5		Social Diversity in the U.S. ¹ ●	5*		
ENR 300.01 (Intro to Soil Science)	3		EPM MAJOR REQUIREMENTS on first page		31 Hours	
NATURAL RESOURCES CORE REQUIREMENTS	16 Hours		Select One ² : ENR 311 (Env Comm & Ed) or ENR 340 (Parks & Rec)	3		
ENR 201 (Intro to Environmental Science)	5		ENR 545 (Adv. Perspectives of Nat Res Administration)	5		
ENR 203 (Society and Natural Resources)	5		ENR 640 (Natural Resources Planning I)	5		
ENR 606.01 (Natural Resources Management)	5		ENR 641 (Natural Resources Planning II)	3		
ENR 119.01 (Intro to Natural Resources Social Sciences)	1		ENR 642 (Natural Resources Administration)	5		
			ENR 615 (Env Comm & Risk Management)	5		
			Select One Intermediate 300 level Social Science course: Recommended Courses: HDFS 361 or HDFS 364 or Pol Sci 300 or Pol Sci 305 or Pol Sci 245 or Pol Sci 510 or Psych 300 or Psych 310 or Psych 312 or Psych 325 or Rural Sociology 378 or Sociology 345 or Sociology 391 or another course approved by faculty advisor	5		
			EPM MAJOR REQUIREMENTS from second page		40 Hours	
Free Electives ★♦●	20 Hours		MINIMUM HRS FOR GRADUATION		190 Hours	

¹ From GEC list

² Selected course may not be double counted in the major.

³ Other 367 courses may be substituted for the 2nd writing requirement. Five hours required from Part B of Arts & Humanities (Analysis of Texts & Works of Art).

⁴ These courses are prerequisites for declaring your major. Please see your advisor in 210 Kottman Hall when completed.

† Fulfills both GEC 2nd writing & GEC Cultures & Ideas requirements simultaneously.

* Requirements may be double counted with another GEC Requirement. If you do not overlap these courses, additional coursework will be required to complete your degree requirements.

★ Students are permitted and recommended to double count their GEC International Issues: non-western-global requirement with another GEC category.

♦ Students are permitted and recommended to double count their GEC International Issues: western focus (non U.S.) requirement with another GEC category.

● Students are permitted and recommended to double count their GEC Social diversity requirement with another GEC category.

ENR/AED Econ 531 (Env & Nat Res Economics)	5	
ENR 601 (Eval of Env Impact) or ENR 752 (Env Science & Law) or another law course with faculty advisor approval	4	
ENR 650 (Advanced Soil Classification) or ENR 647 (Wilderness Policy) or ENR 736 (Public Forests and Lands Policy) or another policy course with faculty advisor approval	4-5	
Additional ENR courses focused in one of four areas: (Water or Soils or Forestry or Wildlife) with faculty advisor approval	12	
Additional Specialization Courses (200 level or above) with faculty advisor approval	14-15	
	40 Hours	

[illegible]

Student Signature _____

Date _____

Faculty Advisor Signature _____

Date _____

□ Revision

The Ohio State University School of Environment and Natural Resources

General Education Curriculum (GEC) Course Listing (Revised ASC Model)

Autumn Quarter 2006

Diversity Experiences

You should plan to overlap these courses with another GEC category or your major. If you do not plan such overlap, the diversity experiences requirement must still be met.

Social Diversity in the United States

Select one course. Those courses designated with a dot (•) overlap with another GEC category, such as the Social Sciences.

International Issues

As you complete the Social Science and Arts and Humanities categories, ensure that your selection includes courses that fulfill the international issues requirement. You are required to complete two international issues courses, one of which must be a non-western or global course [designated with a star (★)]. The other course may be another non-western or global course, or a western (non-US) course [designated with a diamond (♦)].

Courses meeting the Diversity Experiences requirement are designated as follows:

- Social diversity in the U.S. course
- ★ International issues course: non-western or global
- ♦ International issues course: western (non-US)

Courses Meeting More than One Requirement

You are permitted to double count courses used to satisfy the Diversity Experiences Category with another GEC category (see lists for overlapping courses) or with the major.

†ENR students who take ENR 367 or LARCH 367 are permitted to double count the second writing requirement with the Cultures & Ideas GEC requirement [Courses designated with a dagger (†)]. Students are encouraged to double count these GEC requirements and take an additional 5 credit hours towards free elective or specialization courses. (A minimum of 190 credit hours to graduate is required for all ENR majors.)

Social Sciences

The following two Social Sciences courses are required for all Natural Resources majors:

Environment & Natural Resources 400
AED Economics 200 *or* Economics 200

Select one additional course from the following three lists. It is recommended to choose a course that will double count with the Social Diversity in the U.S. diversity requirement (•). **28**

A. Individuals and Groups

African-American and African Studies 101, 218
Anthropology 201 ★, 202 ★, 421.08
Communication 101, 200, 431
Human Development and Family Science 360, 361, 364
International Studies 356
Linguistics 170 ★, 270 (202), 372 (361) •, 371, 375 (365) ★
Political Science 201
Psychology 100 •², 371
Rural Sociology 378 ★
Social Work 230
Sociology 210, 370, 380
Speech and Hearing Science 330, 350
Textiles and Clothing 372
Women's Studies 110 •

Note: Psych 100 may also count as Social Diversity as of Au 03 and after.

B. Organizations and Politics

Economics 201
Family Resource Management 243
Geography 460, 643 ★
International Studies 201 ★, 230 ★, 231 ★, 235 ★, 245 ★, 250 ★
Environment & Natural Resources 400
Political Science 100 ★, 101, 165, 210, 245 ★
Rural Sociology 105 •
Sociology 101 •, 345

C. Human, Natural, and Economic Resources

Agricultural, Environmental, & Development Economics 200
Economics 110, 200
Family Resource Management 340
Geography 200 ★, 240 ★, H410, 430
International Studies 210 ♦, 215 ★, 240 ★
Political Science 145 ★
Sociology 463, 466

Arts and Humanities

Courses in this category noted with a ●, ★ or ♦ may be double counted with a Diversity Experiences requirement.

A. Historical Survey 10 hours

Select one two-course sequence.

African-American and African Studies 121 ★ –122 ★ Economics 515 ★ –516 ★

History 111♦–112♦, 121 ★ –122 ★, 141 ★ –142 ★,

151–152, 171 ★ –172 ★, 181 ★ –182 ★

Philosophy H111♦–H112♦

B. Analysis of Texts and Works of Art 15 hours

Select 15 credit hours from the following lists, with at least one course from the Literature section and one course from the Visual & Performing Arts section.

1. Literature 5 hours

African-American and African Studies 154, 251 ★, 254, 271, 345, 367.02●, 367.03●, 367.04●, 452 ★, 453 ★, 551●

Arabic 371 ★, 372 ★

Chinese 251 ★, 501 ★, 502 ★, 503 ★, 504 ★

Classics 101♦, 102♦, 222♦

Comparative Studies 100 ★, 201♦, 202.01 ★, 202.02 ★, 203♦,

204♦, 205●, H240♦, 273♦, 301 ★, 306 ★, 308 ★, 314 ★

English 201♦, 202♦, 220♦, 260, 261, 262, 275, 280, 281●, 290, 291, 367.02●, 367.03●,

French 150♦, 151♦, 152 ★

German 250, 260.01♦, 260.02♦, 260.03♦, H263♦, 291♦, 292♦, 399♦

Hebrew 370 ★, 372 ★, 373 ★, 374 ★, 378 ★

Italian 151♦, 152♦

Japanese 251 ★, 252 ★

Korean 251 ★

Modern Greek 371♦

Near Eastern Languages and Cultures 271 ★, 371 ★, 372 ★, 374 ★

Persian 370 ★, 371 ★

Philosophy 215 ★, 301♦, 302♦, 303♦, 304♦, 305♦, 306, 307♦

Russian 250 ★

Scandinavian 222♦

Slavic Languages and Literatures 245♦

Spanish 320♦, 321♦, 520 ★

Theatre 367.02●

Turkish 371 ★, 372 ★

Women's Studies 215, 367.01●, 367.02●, 367.03●, 367.04●, 372 ★

Yiddish 371♦, 399♦

2. Visual/Performing Arts 5 hours

Architecture 271

Art 205 (170), 206 (172), 300 (201), 340 (240), H455²

Art Education 160, 252, 367.01●

Comparative Studies 358♦

Dance 161, 200

East Asian Languages and Literatures 346

English 263

History of Art 210♦, 211♦, 212♦, 213 ★, 216 ★, 260 ★, 300(250)♦, 301, 305, 315 (515)♦, 316, 330(530), 340, 345, 350, 360, 505 ★, 519♦, 520♦, 525♦, 576 ★

Italian 221♦

Korean 505

Landscape Architecture 201

School of Environment and Natural Resources
Office of the School Secretary

Medieval and Renaissance Studies 219♦

Modern Greek 268♦

Music 250(140)★, 251(141)♦, 252(142), 253(150), 341,

345.01, 347♦, 349

Philosophy 240, H242

Physics H455

Russian 360 ★

Scandinavian 520♦

Spanish 322♦, 330 ★, 380 ★

Theatre 100●, H101, 161, H230, 271, 280¹

Women's Studies 317

¹Note that this is a three credit-hour course and by itself does not meet the minimum credit-hour requirement for the VPA in Arts and Sciences. ²Note that these cross-listed courses are repeatable; however, only one five-credit hour version can count toward the GEC.

3. Cultures and Ideas

Natural Resources 367† (*recommended*) or
Landscape Architecture 367† (*recommended*)

African-American and African Studies 342 ★, 485.01 ★

Anthropology 241 ★

Arabic 241 ★, 367●, 377 ★

Arts and Sciences 500

Chinese 231 ★, 232 ★

Classics 224♦, 225♦, 226♦, 230♦, 240♦

Comparative Studies 234●, 241●, 242●, 264, 270 ★, 272♦, 274, 275, 305♦, 315 ★, 335 ★, 336●, 339, 345, 367.01●, 367.02●, 367.03●, 376 ★, 377 ★

Dance 357●

East Asian Languages and Literatures 131 ★, 341 ★

English H167, 264, 270, 271, 276, 277

French 153

German 275♦, 299♦

Hebrew 216 ★, 241 ★, 376 ★, 379

History 306♦, 330.01 ★, 346●

History of Art 306(240) ♦

Japanese 231 ★

Jewish Studies 201♦

Korean 231 ★

Linguistics 201, 301(311)

Medieval and Renaissance Studies 210♦, 211 ★, 212♦, 213 ★, 214 ★, 215♦, 216 ★, 217♦, 218 ★, 226♦, 240♦

Modern Greek 241♦

Near Eastern Languages and Cultures 241 ★, 244 ★, 311, 314 ★, 341, 344 ★, 345 ★, 351 ★, 360, 370 ★

Persian 241 ★

Philosophy 101, 130, 230, 270, 336●

Portuguese 330 ★

Romanian 235♦

Russian 135 ★, 235 ★

Slavic Languages and Literatures 130♦

Spanish 150♦, 151 ★, 331 ★

Turkish 241 ★

Women's Studies 101●

Yiddish 241♦, 367

SUGGESTED COURSE SEQUENCE FOR Environmental Policy & Management

	AUTUMN	WINTER	SPRING
Year 1	FAES 100 (NRE) - 1 hr ENR 201 - 5 hrs Math 130 or 148 - 4 hrs Chem 101 or 121 - 5 hrs Free Electives - 2 hrs	ENR 119.01 - 1 hr ENR 203 - 5 hrs Biology 113 - 5 hrs English 110 - 5 hrs Free Electives - 2 hrs	ENR 400 - 5 hrs ENR 222 - 5 hrs Chem 102 or 122 or Biol 114 - 5 hrs Free Electives - 2 hrs
Year 2	ENR 311 or ENR 300.01 - 3 hrs Chem 102 or 122 or Biol 114 - 5 hrs AED Econ 200 or Econ 200 - 5 hrs ENR 367 or GEC (Social Sci) - 5 hrs	ENR 340 or ENR 300.01 - 3 hrs ENR 545 - 5 hrs ENR 367 or GEC (Social Sci) - 5 hrs GEC (History I) or ENR 567 - 5 hrs	ENR 601 or Specialization - 4 or 5 GEC (History II) or ENR 567 - 5 Free Electives - 2 hrs ENR/AED Econ 531 - 5 or Intermed. Social Sci Course - 5 hrs
Year 3	ENR 640 - 5 hrs ENR 567 or Specialization - 5 hrs Free Electives - 2 hrs ENR/AED Econ 531 or Intermed. Social Sci Course - 5 hrs	ENR 641 - 3 hrs ENR 615 - 5 hrs Specialization - 5 hrs ENR 647 or Specialization - 4 or 5 hrs Free Electives - 2 hrs	ENR 642 - 5 hrs GEC (Literature) - 5 hrs Specialization - 3 hrs ENR 601 or ENR 736 or ENR 651 or Specialization - 4 or 5 hrs
Year 4	ENR 752 or Specialization - 4 or 5 hrs GEC (VPA) - 5 hrs Specialization - 5 hrs Free Electives - 2 hrs	ENR 606.01 or Specialization - 5 hrs Specialization - 5 hrs Specialization - 5 hrs Free Electives - 2 hrs	ENR 606.01 or Specialization - 5 hrs Specialization - 5 hrs Free Electives - 2 hrs ENR 601 or ENR 736 or ENR 651 or Specialization - 4 or 5 hrs

This suggested study plan provides basic guidelines in program planning. Individual progress will vary based on the student's ability to meet course prerequisites, workload and availability. Students are encouraged to develop their individual study plans in consultation with their faculty advisor. Effective planning helps to ensure efficiency and balance within the degree program.

Parks, Recreation and Tourism

Parks, Recreation and Tourism

COURSE & NUMBER	HRS	✓	COURSE & NUMBER	32	HRS	✓
UNIVERSITY REQUIREMENTS			UNIVERSITY REQUIREMENTS			
FAES 100 (University Survey)	1 Hour		Arts and Humanities	20 Hours		
Writing Skills	15 Hours		History Survey I ¹ ★♦	5		
English 110 or 111 (Composition)	5		History Survey II ¹ ★♦	5		
ENR 367 † or LARCH 367 † (2nd Writing Course)	5*		ENR 367 † ⁴ or LARCH 367 † ⁴	5*		
ENR 567 (3rd Writing Course)	5		Literature ¹ ♦★●	5		
Data Analysis, Quantitative & Logical Skills	9 Hours		Visual/Performing Art ¹ ♦★	5		
ENR 222 (Recommended) or Stat 135 or Stat 145 or H&CS 260 or Animal Science 260	5		Social Sciences	15 Hours		
Math 130 or Math 148 or above	4		AED Econ 200 or Economics 200 (Microeconomics)	5		
			ENR 400 (Nat Res Policy)	5		
Natural Sciences	23 Hours		Third Social Science ♦★●	5		
Chem 101 (Elementary Chemistry I) or Chem 121 (General Chemistry I)	5		Diversity Experiences			
Chem 102 (Elementary Chem II) or Chem 122 (General Chemistry II)	5		International Issues <i>Non-western/Global Focus</i> ¹ ★ A Study Abroad experience may be used toward this requirement with degree unit approval.	5*		
Biology 113 (Energy Transfer & Development)	5		International Issues <i>Western Focus</i> (non-U.S.) ¹ ♦ A Study Abroad experience may be used toward this requirement with degree unit approval.	5*		
Biology 114 (Form, Function, Diversity & Ecology)	5		Social Diversity in the U.S. ¹ ●	5*		
ENR 300.01 (Intro to Soil Science)	3		PRT MAJOR REQUIREMENTS on first page	31 Hours		
ENR CORE REQUIREMENTS	16 Hours		Select One ² : ENR 311 (Env Comm & Ed) or ENR 340 (Parks & Rec)	3		
ENR 201 (Intro to Environmental Science)	5		ENR 545 (Adv. Perspectives of Nat Res Administration)	5		
ENR 203 (Society and Natural Resources)	5		ENR 640 (Natural Resources Planning I)	5		
ENR 606.01 (Natural Resources Management)	5		ENR 641 (Natural Resources Planning II)	3		
ENR 119.01 (Intro to Natural Resources Social Sciences)	1		ENR 642 (Natural Resources Administration)	5		
			ENR 615 (Env Comm & Risk Management)	5		
			Select One Intermediate 300 level Social Science course: Recommended Courses: HDFS 361 or HDFS 364 or Pol Sci 300 or Pol Sci 305 or Pol Sci 245 or Pol Sci 510 or Psych 300 or Psych 310 or Psych 312 or Psych 325 or Rural Sociology 378 or Sociology 345 or Sociology 391 or another course approved by faculty advisor	5		
			PRT MAJOR REQUIREMENTS from second page	40 Hours		
Free Electives ★♦●	20 Hours		MINIMUM HRS FOR GRADUATION	190 Hours		

¹ From GEC list

² Selected course may not be double counted in the major.

³ Other 367 courses may be substituted for the 2nd writing requirement. Five hours required from Part B of Arts & Humanities (Analysis of Texts & Works of Art).

⁴ These courses are prerequisites for declaring your major. Please see your advisor in 210 Kottman Hall when completed.

† Fulfills both GEC 2nd writing & GEC Cultures & Ideas requirements simultaneously.

* Requirements may be double counted with another GEC Requirement. If you do not overlap these courses, additional coursework will be required to complete your degree requirements.

♦ Students are permitted and recommended to double count their GEC International Issues: non-western-global requirement with another GEC category.

★ Students are permitted and recommended to double count their GEC International Issues: western focus (non U.S.) requirement with another GEC category.

● Students are permitted and recommended to double count their GEC Social diversity requirement with another GEC category.

ENR 643 (Outdoor Rec & Tourism Private Sector)	4
Bus Fin 510 (Legal Environment of Business)	4
Bus MHR 660 (Intro to Human Res Mgt) or AED Econ 401 (Principles of Agribusiness Mgt)	4
Additional courses in ENR or related discipline with advisor approval	28
	40 Hours

Contracted Specialization Courses: <i>A minimum of 28 hours approved by the faculty advisor</i>	Credit Hours
Credit Hour Total:	

Student Signature

Date

Faculty Advisor Signature

Date

☐ Revision

The Ohio State University

School of Environment and Natural Resources

General Education Curriculum (GEC) Course Listing (Revised ASC Model)

Autumn Quarter 2006

Diversity Experiences

You should plan to overlap these courses with another GEC category or your major. If you do not plan such overlap, the diversity experiences requirement must still be met.

Social Diversity in the United States

Select one course. Those courses designated with a dot (•) overlap with another GEC category, such as the Social Sciences.

International Issues

As you complete the Social Science and Arts and Humanities categories, ensure that your selection includes courses that fulfill the international issues requirement. You are required to complete two international issues courses, one of which must be a non-western or global course [designated with a star (★)]. The other course may be another non-western or global course, or a western (non-US) course [designated with a diamond (♦)].

Courses meeting the Diversity Experiences requirement are designated as follows:

- Social diversity in the U.S. course
- ★ International issues course: non-western or global
- ♦ International issues course: western (non-US)

Courses Meeting More than One Requirement

You are permitted to double count courses used to satisfy the Diversity Experiences Category with another GEC category (see lists for overlapping courses) or with the major.

†ENR students who take ENR 367 or LARCH 367 are permitted to double count the second writing requirement with the Cultures & Ideas GEC requirement [Courses designated with a dagger (†)]. Students are encouraged to double count these GEC requirements and take an additional 5 credit hours towards free elective or specialization courses. (A minimum of 190 credit hours to graduate is required for all ENR majors.)

Social Sciences

The following two Social Sciences courses are required for all Natural Resources majors:

Environment & Natural Resources 400
AED Economics 200 *or* Economics 200

School of Environment and Natural Resources
Office of the School Secretary

Select one additional course from the following three lists. It is recommended to choose a course that will double count with the Social Diversity in the U.S. diversity requirement (•) **34**

A. Individuals and Groups

African-American and African Studies 101, 218
Anthropology 201 ★, 202 ★, 421.08
Communication 101, 200, 431
Human Development and Family Science 360, 361, 364
International Studies 356
Linguistics 170 ★, 270 (202), 372 (361) •, 371, 375 (365) ★
Political Science 201
Psychology 100 •², 371
Rural Sociology 378 ★
Social Work 230
Sociology 210, 370, 380
Speech and Hearing Science 330, 350
Textiles and Clothing 372
Women's Studies 110 •

Note: Psych 100 may also count as Social Diversity as of Au 03 and after.

B. Organizations and Politics

Economics 201
Family Resource Management 243
Geography 460, 643 ★
International Studies 201 ★, 230 ★, 231 ★, 235 ★, 245 ★, 250 ★
Environment & Natural Resources 400
Political Science 100 ★, 101, 165, 210, 245 ★
Rural Sociology 105 •
Sociology 101 •, 345

C. Human, Natural, and Economic Resources

Agricultural, Environmental, & Development Economics 200
Economics 110, 200
Family Resource Management 340
Geography 200 ★, 240 ★, H410, 430
International Studies 210 ♦, 215 ★, 240 ★
Political Science 145 ★
Sociology 463, 466

Arts and Humanities

Courses in this category noted with a ●, ★ or ♦ may be double counted with a Diversity Experiences requirement.

A. Historical Survey 10 hours

Select one two-course sequence.

African-American and African Studies 121 ★ –122 ★ Economics 515 ★ –516 ★
History 111 ♦ –112 ♦, 121 ★ –122 ★, 141 ★ –142 ★,
151 –152, 171 ★ –172 ★, 181 ★ –182 ★
Philosophy H111 ♦ –H112 ♦

B. Analysis of Texts and Works of Art 15 hours

Select 15 credit hours from the following lists, with at least one course from the Literature section and one course from the Visual & Performing Arts section.

1. Literature 5 hours

African-American and African Studies 154, 251 ★, 254,
271, 345, 367.02 ●, 367.03 ●, 367.04 ●, 452 ★, 453 ★, 551 ●
Arabic 371 ★, 372 ★
Chinese 251 ★, 501 ★, 502 ★, 503 ★, 504 ★
Classics 101 ♦, 102 ♦, 222 ♦
Comparative Studies 100 ★, 201 ♦, 202.01 ★, 202.02 ★, 203 ♦,
204 ♦, 205 ●, H240 ♦, 273 ♦, 301 ★, 306 ★, 308 ★, 314 ★
English 201 ♦, 202 ♦, 220 ♦, 260, 261, 262, 275, 280, 281 ●,
290, 291, 367.02 ●, 367.03 ●,
French 150 ♦, 151 ♦, 152 ★
German 250, 260.01 ♦, 260.02 ♦, 260.03 ♦, H263 ♦, 291 ♦,
292 ♦, 399 ♦
Hebrew 370 ★, 372 ★, 373 ★, 374 ★, 378 ★
Italian 151 ♦, 152 ♦
Japanese 251 ★, 252 ★
Korean 251 ★
Modern Greek 371 ♦
Near Eastern Languages and Cultures 271 ★, 371 ★,
372 ★, 374 ★
Persian 370 ★, 371 ★
Philosophy 215 ★, 301 ♦, 302 ♦, 303 ♦, 304 ♦, 305 ♦, 306, 307 ♦
Russian 250 ★
Scandinavian 222 ♦
Slavic Languages and Literatures 245 ♦
Spanish 320 ♦, 321 ♦, 520 ★
Theatre 367.02 ●
Turkish 371 ★, 372 ★
Women's Studies 215, 367.01 ●, 367.02 ●, 367.03 ●,
367.04 ●, 372 ★
Yiddish 371 ♦, 399 ♦

2. Visual/Performing Arts 5 hours

Architecture 271
Art 205 (170), 206 (172), 300 (201), 340 (240), H455²
Art Education 160, 252, 367.01 ●
Comparative Studies 358 ♦
Dance 161, 200
East Asian Languages and Literatures 346
English 263
History of Art 210 ♦, 211 ♦, 212 ♦, 213 ★, 216 ★,
260 ★, 300(250) ♦, 301, 305, 315 (515) ♦, 316, 330(530),
340, 345, 350, 360, 505 ★, 519 ♦, 520 ♦, 525 ♦, 576 ★
Italian 221 ♦
Korean 505
Landscape Architecture 201

Medieval and Renaissance Studies 219 ♦

Modern Greek 268 ♦

Music 250(140) ★, 251(141) ♦, 252(142), 253(150), 341,
345.01, 347 ♦, 349¹

Philosophy 240, H242²

Physics H455²

Russian 360 ★

Scandinavian 520 ♦

Spanish 322 ♦, 330 ★, 380 ★

Theatre 100 ●, H101, 161, H230, 271, 280¹

Women's Studies 317

¹Note that this is a three credit-hour course and by itself does not meet the minimum credit-hour requirement for the VPA in Arts and Sciences. ²Note that these cross-listed courses are repeatable; however, only one five-credit hour version can count toward the GEC.

3. Cultures and Ideas

Natural Resources 367† (*recommended*) or
Landscape Architecture 367† (*recommended*)

African-American and African Studies 342 ★, 485.01 ★

Anthropology 241 ★

Arabic 241 ★, 367 ●, 377 ★

Arts and Sciences 500

Chinese 231 ★, 232 ★

Classics 224 ♦, 225 ♦, 226 ♦, 230 ♦, 240 ♦

Comparative Studies 234 ●, 241 ●, 242 ●, 264, 270 ★, 272 ♦, 274,
275, 305 ★, 315 ★, 335 ★, 336 ●, 339, 345, 367.01 ●, 367.02 ●,
367.03 ●, 376 ★, 377 ★

Dance 357 ●

East Asian Languages and Literatures 131 ★, 341 ★

English H167, 264, 270, 271, 276, 277

French 153

German 275 ♦, 299 ♦

Hebrew 216 ★, 241 ★, 376 ★, 379

History 306 ♦, 330.01 ★, 346 ●

History of Art 306(240) ♦

Japanese 231 ★

Jewish Studies 201 ♦

Korean 231 ★

Linguistics 201, 301(311)

Medieval and Renaissance Studies 210 ♦, 211 ★, 212 ♦, 213 ★,
214 ★, 215 ♦, 216 ★, 217 ♦, 218 ★, 226 ♦, 240 ♦

Modern Greek 241 ♦

Near Eastern Languages and Cultures 241 ★, 244 ★, 311, 314 ★,
341, 344 ★, 345 ★, 351 ★, 360, 370 ★

Persian 241 ★

Philosophy 101, 130, 230, 270, 336 ●

Portuguese 330 ★

Romanian 235 ♦

Russian 135 ★, 235 ★

Slavic Languages and Literatures 130 ♦

Spanish 150 ♦, 151 ★, 331 ★

Turkish 241 ★

Women's Studies 101 ●

Yiddish 241 ♦, 367

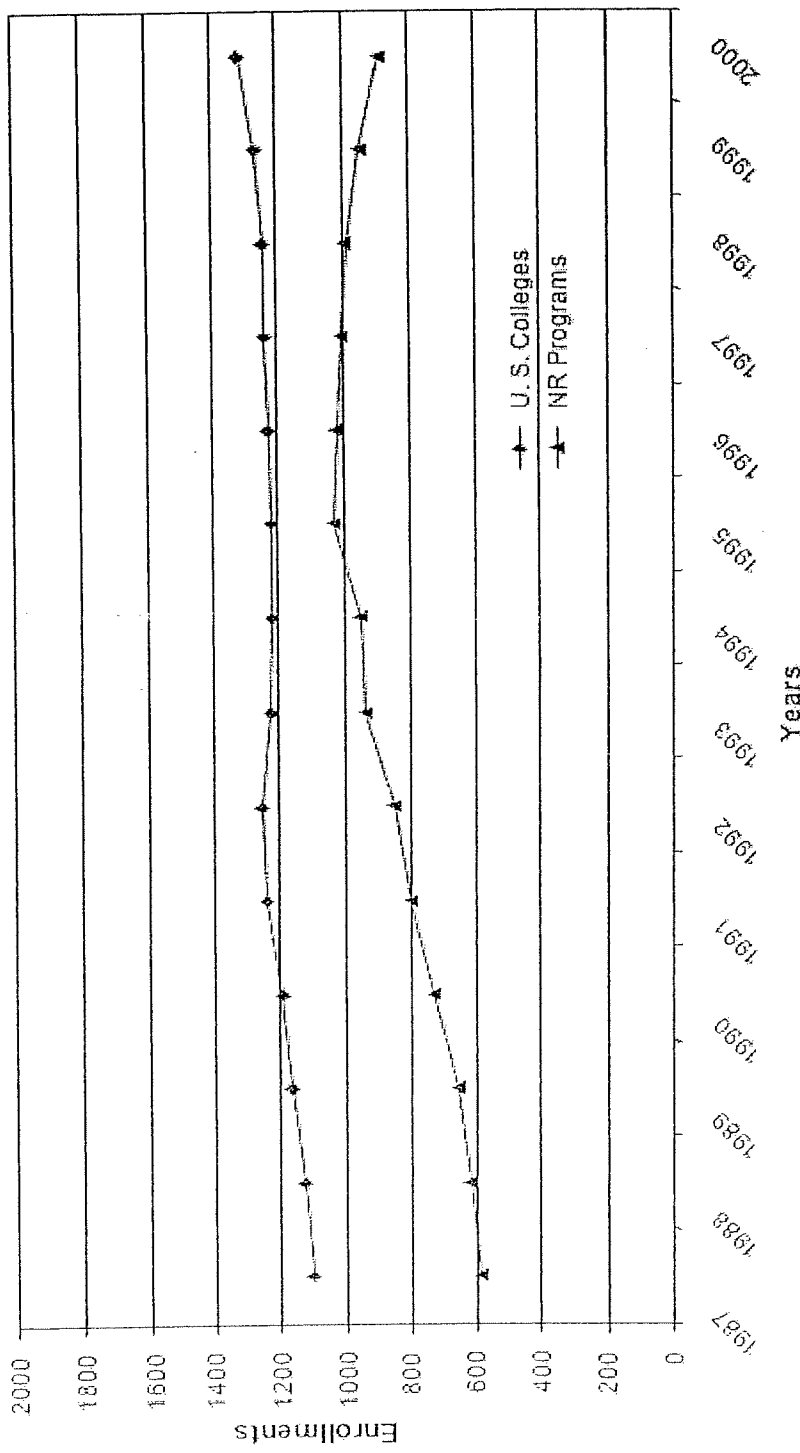
**SUGGESTED COURSE SEQUENCE FOR
Parks, Recreation, and Tourism**

	AUTUMN	WINTER	SPRING
Year 1	FAES 100 (NRE) - 1 hr ENR 201 - 5 hrs Math 130 or 148 - 4 hrs Chem 101 or 121 - 5 hrs Free Electives - 2 hrs	ENR 119.01 - 1 hr ENR 203 - 5 hrs Biology 113 - 5 hrs English 110 - 5 hrs Free Electives - 2 hrs	ENR 400 - 5 hrs ENR 222 - 5 hrs Chem 102 or 122 or Biol 114 - 5 hrs Free Electives - 2 hrs
Year 2	ENR 311 or ENR 300.01 - 3 hrs Chem 102 or 122 or Biol 114 - 5 hrs AED Econ 200 or Econ 200 - 5 hrs ENR 367 or GEC (Social Sci) - 5 hrs	ENR 340 or ENR 300.01 - 3 hrs ENR 545 - 5 hrs ENR 367 or GEC (Social Sci) - 5 hrs GEC (History I) or Nat Res 567 - 5 hrs	ENR 643 or Specialization - 4 or 5 GEC (History II) or ENR 567 - 5 Free Electives - 2 hrs ENR/AED Econ 531 - 5 or Intermed. Social Sci Course - 5 hrs
Year 3	ENR 640 - 5 hrs ENR 567 or Specialization - 5 hrs Free Electives - 2 hrs ENR/AED Econ 531 or Intermed. Social Sci Course - 5 hrs	ENR 641 - 3 hrs ENR 615 - 5 hrs Specialization - 5 hrs ENR 647 or Specialization - 4 or 5 hrs Free Electives - 2 hours	ENR 642 - 5 hrs GEC (Literature) - 5 hrs Specialization - 3 hrs ENR 601 or ENR 736 or Bus Fin 510 - 4 hrs Free Electives - 2 hours
Year 4	Bus MHR 660 or AED Econ 401 or Specialization - 4 or 5 hrs Specialization - 5 hrs GEC (VPA) - 5 hrs Free Electives - 2 hrs	ENR 606.01 or Specialization - 5 hrs Specialization - 5 hrs Specialization - 5 hrs Free Electives - 2 hrs	ENR 606.01 or Specialization - 5 hrs Specialization - 5 hrs Specialization - 5 hrs Free Electives - 2 hrs

This suggested study plan provides basic guidelines in program planning. Individual progress will vary based on the student's ability to meet course prerequisites, workload and availability. Students are encouraged to develop their individual study plans in consultation with their faculty advisor. Effective planning helps to ensure efficiency and balance within the degree program.

Appendix A: Graphs

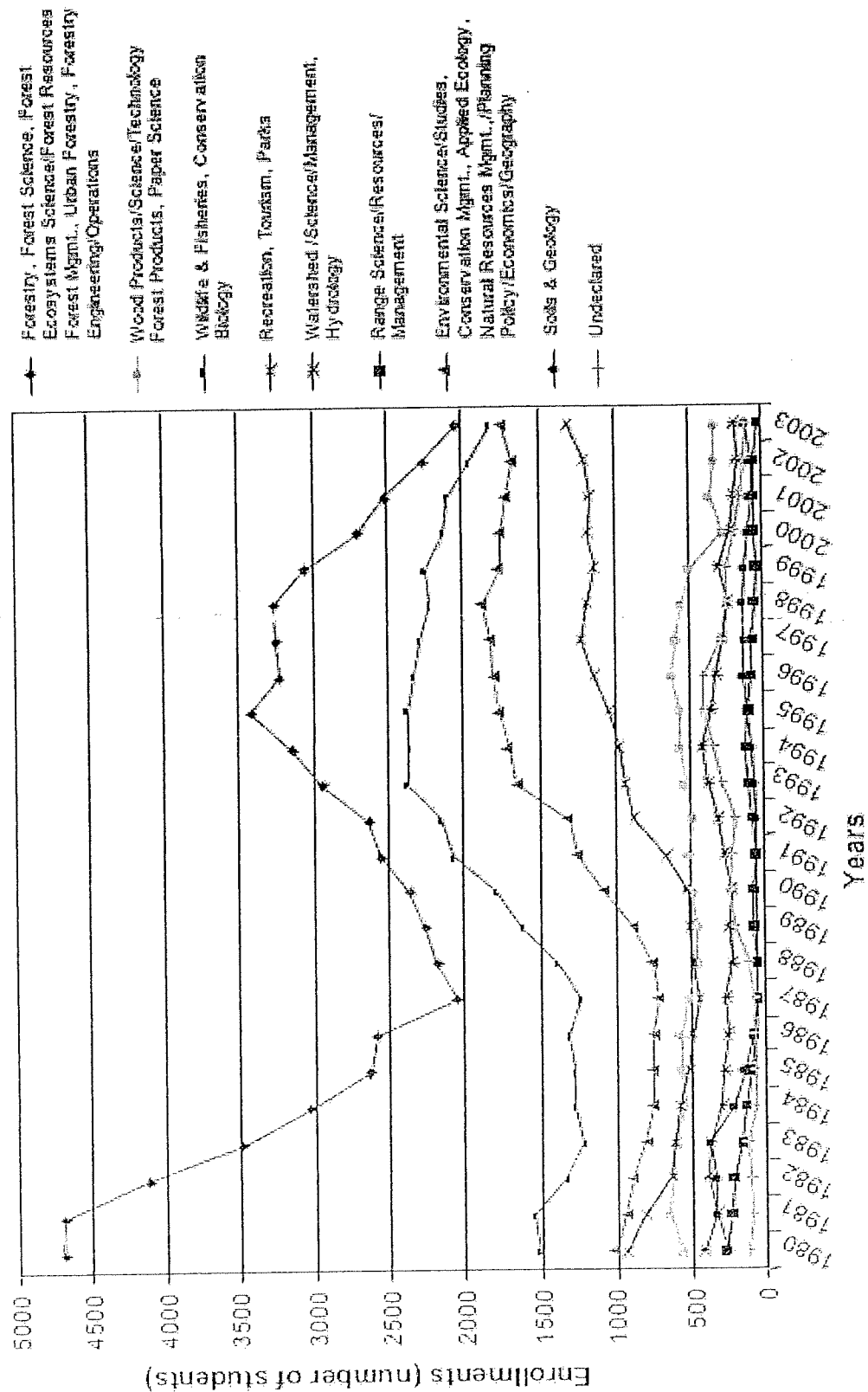
Total U.S. Undergraduate Enrollment Rates (x104) in Degree-Granting Institutions*
Comparison to Undergraduate Enrollments (x10-1) in Natural Resources (NR)
At NAFFSC Institutions**, 1987-2000



*U.S. Dept. of Educ., National Center for Education Statistics, 2002

**Based on data from 24 institutions

Undergraduate Enrollments in Natural Resources by Field Of Study for NAFSC Institutions, 1980-2003



Total of 24 institutions represented.

Appendix B: Career Tracks Faculty Advising Documents

School of Environment and Natural Resources The Ohio State University

Environmental Policy & Management Major Specialized Career Tracks

- **Environmental Consulting**
- **Environmental Health & Safety**
- **Resources Management Agencies**
- **Non-profit Sector**
- **Graduate School preparation**
- **Law School preparation**

An undergraduate student guide & faculty advising tool for selection of courses in the specialized career tracks of Environmental Policy and Management Major

School of Environment and Natural Resources The Ohio State University

Environmental Policy & Management Major Specialized Career Tracks

Environmental Consulting

The Environmental Consulting career track prepares students to work in the consulting industry as authorities on statutes, regulations, and procedures relevant to natural resources remediation and rehabilitation. Students will learn to work with engineers, scientists and politicians to manage and direct projects.

Environmental Health and Safety

The Environmental Health and Safety career track is for students with interest in the environmental and public health arena. Students will take specialization courses related to environmental & medical health environmental safety, city & regional planning, environmental compliance enforcement, hazardous waste policy management, soil and water policy management, and food & environmental security.

Resource Management Agencies

The Resource Management Agencies career track is for students who are interested to working for a local, state, or federal agency. Students will enroll in a variety of courses that will prepare them for understanding environmental management in an agency context. Also, students will formulate a basic understanding of the functions and processes of public affairs as well as the collaborative efforts of the government and shareholders.

Non-Profit Sector

The Non-Profit Sector career track prepares students to work with non-profit and non-government organizations. Courses will include business administration, professional writing, as well as many environmental management based classes. Students interested in this area should be familiar with grassroots activism as well as public service. An internship and practicum is recommended for this career track.

Graduate School Preparation

The Graduate School Preparation track will prepare students who are interested in obtaining a higher education degree in a natural science field. Students will be required to take upper level undergraduate and some graduate level coursework. Also, students will have the opportunity to select courses that further their academic interests, have opportunities to participate in undergraduate research, and have increased exposure to scientific journals.

Law School Preparation

The Law School Preparation career track is for students who are planning to pursue a professional law degree in environmental or natural resources law. The coursework in this career track will focus on environmental legislation as well as scholarly writing and policy analysis. Students will take courses that emphasize policy formation, historical contexts, and future implications.

Environmental Policy & Management Major

Recommended Courses for Specialized Career Tracks:

Environmental Consulting

Business Admin Finance 420	Foundations of Finance	4
Business Admin Finance 510	Legal Environment	5
English 304	Business and Professional Writing	2-5
ENR 693	Natural Resources Individual Study	2-5
ENR 694	Natural Resources Group Study	5-15
ENR 697	Study at a Foreign Institution	2-5
ENR 498	Natural Resources Study Tour	2-5
ENR 698	Natural Resources Study Tour	2-5
Geography 607		
City & Regional Planning 607	Fundamentals of Geographic Information Systems	5
Geodetic Sciences 607	(cross-listed course)	
Geological Sciences 607		

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Environmental Policy & Management Major

Recommended Courses for Specialized Career Tracks:

Environmental Health & Safety

Business Admin Finance 420	Foundations of Finance	4
Business Admin Finance 510	Legal Environment	5
English 304	Business and Professional Writing	5
Microbiology 509	Introduction to Microbiology	2-5
ENR 693	Natural Resources Individual Study	2-5
ENR 694	Natural Resources Group Study	5-15
ENR 697	Study at a Foreign Institution	2-5
ENR 498	Natural Resources Study Tour	2-5
ENR 698	Natural Resources Study Tour	5
Geography 607		
City & Regional Planning 607	Fundamentals of Geographic Information Systems	
Geodetic Sciences 607	(cross-listed course)	
Geological Sciences 607		

Additional courses in public health, public safety, soil science, water, and hazardous materials & waste will be recommended designed to satisfy specific career tracks and professional certification requirements (i.e. OSHA, EPA, NRCS, Public Health, etc.). These courses may be completed at OSU or partner academic institutions: (i.e. CSCC Environmental Health & Safety Technology program, etc.) Such courses require School and faculty advisor approval.

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

* Indicates course is highly recommended for this career track.

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Environmental Policy & Management Major

Recommended Courses for Specialized Career Tracks:

Resource Management Agencies

Ag Construction Systems Mgt 371	Land Surveying	3
AED Economics 470	Agricultural Law	
AED Economics 503	Economics of Public Policy Analysis	
AED Economics 631	Benefit-Cost Analysis	
English 304	Business and Professional Writing	
Geography 607		
City & Regional Planning 607	Fundamentals of Geographic Information Systems	5
Geodetic Sciences 607	(cross-listed course)	
Geological Sciences 607		
ENR 498	Natural Resources Study Tour	2-5
ENR 698	Natural Resources Study Tour	2-5
ENR 693	Natural Resources Individual Study	2-5
ENR 694	Natural Resources Group Study	2-5
ENR 697	Study at a Foreign Institution	2-15
Public Policy & Management: 552	Introduction to Public Policy Analysis	
Public Policy & Management: 631	Federal Finance and Fiscal Policy	
Public Policy & Management 633	State and Local Government Finance	
Public Policy & Management 796	Managing in the Political Environment	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

* Indicates course is highly recommended for this career track.

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Environmental Policy & Management Major

Recommended Courses for Specialized Career Tracks:

Non-profit Sector

Business Admin Finance 420	Foundations of Finance	4
Business Admin Finance 510	Legal Environment	
English: 304	Business and Professional Writing	
ENR 498	Natural Resources Study Tour	
ENR 698	Natural Resources Study Tour	
ENR 693	Natural Resources Individual Study	
ENR 694	Natural Resources Group Study	
ENR 697	Study at a Foreign Institution	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Environmental Policy & Management Major

Recommended Courses for Specialized Career Tracks:

Graduate School preparation

ENR 498	Natural Resources Study Tour
ENR 698	Natural Resources Study Tour
ENR 693	Natural Resources Individual Study
ENR 694	Natural Resources Group Study
ENR 697	Study at a Foreign Institution

Additional natural and/or social science courses

Additional statistics courses

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)

ENR 684/689 (Natural Resources Internship)

2

4

Environmental Policy & Management Major

Recommended Courses for Specialized Career Tracks:

Law School preparation

AED Economics 470	Agricultural Law
ENR 498	Natural Resources Study Tour
ENR 698	Natural Resources Study Tour
ENR 693	Natural Resources Individual Study
ENR 694	Natural Resources Group Study
ENR 697	Study at a Foreign Institution
Philosophy 338	Philosophical Problems in the Law
Philosophy 533	Environmental Ethics
Political Science 210	Introduction to Political Theory
Political Science 515	The Politics of Legal Decision Making

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

School of Environment and Natural Resources The Ohio State University

Parks, Recreation and Tourism Major Specialized Career Tracks

- **Community Recreation Leadership & Management**
- **Eco-tourism & Adventure Program Administration**
- **Environmental Education & Interpretation**
- **Park & Recreation Law Enforcement**
- **Recreation Resource Management**

Sub Option I - Wildland Recreation Management

Sub Option II - Urban Park & Golf Course Management

- **Recreation Resource Planning**

*An undergraduate student guide & faculty advising tool for selection of courses
in the specialized career tracks of the Parks, Recreation and Tourism Major*

Parks, Recreation and Tourism Major Specialized Career Tracks Descriptions

Community Recreation Leadership & Management

The Community Recreation Leadership & Management career track prepares students for a rewarding career in the field of community recreation. Graduates of this program will have the skills necessary to administer community recreation programs in diverse urban settings – from small towns to the largest cities. Graduates will also be trained to begin careers with community-based leadership organizations, such as YMCA, Scouting, municipal recreation and camp programs. Graduates are employed in various positions, including Urban Recreation Director and City Recreation Specialist.

Eco-Tourism & Adventure Program Planning

The Eco-Tourism & Adventure Program Administration career track prepares student for exciting, adrenaline-filled careers in the outdoors. Students will learn the skills necessary to plan and administer challenging high adventure and wilderness skills programs. The Eco-Tourism component focuses on the operation of a tourism enterprise in a manner that is both environmentally responsible and economically viable. Graduates may qualify for positions with expedition outfitters, wilderness leadership programs, and commercial eco-tour specialists.

Environmental Education & Interpretation

The Environmental Education & Interpretation career track focuses on planning, creating and implementing educational programs that deal with various environmental, cultural and historical issues. Students will learn to write lesson plans, develop educational programs, and effectively present their programs to audiences of all ages. Graduates receive positions as environmental education specialists, state and national park interpreters and science teachers.

Park & Recreation Law Enforcement

This career track prepares students to pursue a career in the rewarding field of park and recreation law enforcement. Graduates will have the opportunity to work in a variety of exciting locations, including national and state parks, national and state forests, and wildlife management areas. Graduates of this program will be responsible for protecting both visitors and natural resources, enforcing rules and regulations, and acting as stewards of the environment. Graduates will qualify for positions such as conservation officer (game warden), park ranger, forest ranger, and watercraft officer.

Recreation Resource Management

The Recreation Resource Management career track provides a foundation for students interested in the administration of park and recreation programs at the local, state, and federal level. This career track will include courses in environmental issues, professional ethics, and recreation administration. Graduates of this program are qualified for positions such as park managers, outdoor camp administrators, and recreation program coordinators.

Students can specialize in two different career track sub options:

Sub Option I – Wildland Recreation Management

The Wildland Recreation Management specialization focuses on the administration of primitive recreation programs in wild, often undeveloped outdoor settings. Students will learn the skills needed to successfully manage various wildland recreational pursuits including horseback riding, canoeing, and wilderness backpacking. Careers available to students in this specialization include backcountry ranger, wilderness recreation manager, and outdoor recreation specialists.

Sub Option II – Urban Park & Golf Course Management

The specialization is a unique program designed for the student who wishes to begin a career in the management of urban parks and golf courses. Courses in this specialization include landscape maintenance, turfgrass science, and recreation administration. Graduates are employed in such positions as golf course superintendents and urban park managers.

Recreation Resource Planning

The Recreation Resource Planning option emphasizes a strategic, proactive approach to the management of recreation programs and the natural resources that they depend upon. Students learn the principles needed to develop short and long-range plans that allow for efficient and sustainable recreational programming. Those who select this major will enjoy exciting, challenging careers within their organizations. Upon graduation, students assume careers such as strategic planning managers and recreation program planners.

Parks, Recreation and Tourism Major

Recommended Courses for Specialized Career Tracks:

53

Recreation Resource Management

Ag CSM 370 (Principle of Hydrology)	3	
Business Administration: Finance 510 (Legal Environments of Business)	4	
ENR 311 or ENR 340	3	
ENR 221 (Biology & Identification of Woody Forest Plants)	5	
ENR 232 (Landscape Maintenance)	4	
ENR 319 (Introduction to Forestry, Fisheries & Wildlife)	3	
ENR 333 (Silviculture)	5	
ENR 598 (Natural Resources Management Study Tour)	2-5	
ENR 601 (Evaluation of Environmental Impact)	4	
<u>Sub Option I - Wildland Recreation Management</u>		
* ENR 350.01 (Wildland Fire)	3	certification available
* ENR 350.02 (Wildland Fire Lab)	3	certification available
ENR 510 (Interpreting Natural History of Ohio)	5	
ENR 630 (Soils of Forest Ecosystems)	3	
ENR 610 (Environmental Interpretation & Visitor Services)	5	certification available
* ENR 647 (Wilderness Policy & Management)	4	
ENR 734 (Forest Ecosystem Management)	4	
ENR 736 (Public Forest & Land Policy)	4	
ENR 752 (Environmental Science & Law)	4	
ENR 620 (Principles of Fisheries Ecology & Management)	5	
ENR 623 (Principles of Wildlife Ecology & Management)	5	
ENR 624 (Wildlife Identification & Management)	5	
ENR 625 (Management of Wildlife Habitat)	3	
ENR 627 (Ecology & Management of Aquatic Invertebrates)	5	
ENR 629 (Ecology & Management of Wetland Birds)	3	
<u>Sub Option II - Urban Park & Golf Course Management</u>		
Ag CSM 232 (Small Air-Cooled Engines)	4	
English 304 (Business & Professional Writing)	5	
Hort & Crop Science 435 (Deciduous Shade Trees & Narrow Leaf Evergreens)	6	
Hort & Crop Science 470 (Principles of Turfgrass Selection & Mgt)	4	
Hort & Crop Science xxx (Athletic Fields)	3	
ENR 630 (Soils of Forest Ecosystems)	3	
Plant Pathology 510 (Diseases of Forest & Shade Trees)	3	
Plant Pathology 612 (Turfgrass Diseases)	3	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

* Indicates course is highly recommended for this career track.

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Note: Interdisciplinary Professional Golf Management Program is currently being proposed by the College of Food, Agricultural and Environmental Sciences. Contact your faculty advisor for additional information

Parks, Recreation and Tourism Major

Recommended Courses for Specialized Career Tracks:

Recreation Resource Planning

Ag CSM 370 (Principle of Hydrology)	3
Ag CSM 371 (Land Surveying)	3
AED Economics (Benefit Cost Analysis)	3
Engineering Graphics 121 (Graphic Presentation I or (CAD course)	3
Landscape Architecture 201 (Historical Overview of Human Design on the Land)	3
ENR 232 (Landscape Maintenance)	4
ENR 324 (Natural Resources Photo Interpretation)	3
ENR 598 (Natural Resources Management Study Tour)	2-5
ENR 601 (Evaluation of Environmental Impact)	4
ENR 607 (Spatial Analysis in GIS) or Geography 607 (Fundamentals of GIS)	4
City & Regional Planning 710 (Intro to Urban & Regional Planning for Open Space, Recreation & Conservation)	3

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Parks, Recreation and Tourism Major

Recommended Courses for Specialized Career Tracks:

Environmental Education and Interpretation

ENR 311 or ENR 340	3	
ENR 510 (Interpreting Natural History of Ohio)	5	
* ENR 610 (Environmental Interpretation & Visitor Services)	5	certification available
* ENR 613 (Methods for Environmental & Ecological Education)	5	certification available
ENR 647 (Wilderness Policy & Management)	4	
<i>Flora/Fauna Courses:</i>		
ENR 221 (Biology & Identification of Woody Forest Plants)	5	
ENR 319 (Introduction to Forestry, Fisheries & Wildlife)	3	
ENR 620 (Principles of Fisheries Ecology & Management)	5	
ENR 623 (Principles of Wildlife Ecology & Management)	5	
ENR 624 (Wildlife Identification & Management)	3	
ENR 625 (Management of Wildlife Habitat)	3	
ENR 627 (Ecology & Management of Aquatic Invertebrates)	5	
ENR 629 (Ecology & Management of Wetland Birds)	3	
<i>Field Courses:</i>		
ENR 231 (Research in Avian Ecology)	5	
ENR 350.01 (Wildland Fire)	3	certification available
ENR 350.02 (Wildland Fire Training Lab)	3	certification available
ENR 595.01 (Wilderness Leadership Education - Term)	6	
ENR 595.02 (Wilderness Leadership Education - Quarter)	15	
ENR 596.01 (Environmental Field Studies - Term)	6	
ENR 596.02 (Environmental Field Studies - Quarter)	15	
ENR 598 (Natural Resources Management Study Tour)	2-5	
ENR 690 (Workshop in Environmental Education)	1-3	
ENR 691 (Workshop in Environmental Mgt Education)	1-2	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

* Indicates course is highly recommended for this career track.

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Parks, Recreation and Tourism Major Recommended Courses for Specialized Career Tracks:

Park & Recreation Law Enforcement

Edu PAES 140.10 (Wilderness Advanced First Aid)	3	certification available
English 304 (Business & Professional Writing)	5	
ENR 311 or ENR 340	3	
ENR 319 (Introduction to Forestry, Fisheries & Wildlife)	3	
ENR 350.01 (Wildland Fire)	3	certification available
ENR 350.02 (Wildland Fire Lab)	3	certification available
ENR 3xx (Search & Rescue)	5	certification available
* ENR 448 (Natural Resources Law Enforcement)	4	
* ENR 449 (Park Law Enforcement Ranger Training Program)	15	certification available
ENR 510 (Interpreting Natural History of Ohio)	5	
ENR 598 (Natural Resources Management Study Tour)	2-5	
ENR 610 (Environmental Interpretation & Visitor Services)	5	certification available
ENR 647 (Wilderness Policy & Management)	4	
Sociology 209 (Intro to Criminal Justice)	5	
Sociology 410 (Criminology)	5	
Sociology 618 (Sociology of Police & Policing)	5	
International Studies xxx (Homeland Security Course (food, water, environment))	5	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Parks, Recreation and Tourism Major

Recommended Courses for Specialized Career Tracks:

Eco-tourism & Adventure Program Administration

City & Regional Planning 310 (Intro to City & Regional Planning)	4	
Hospitality Management 230 (Intro to Hospitality Management)	3	
Hospitality Management 300 (The Consumer Prospective)	3	
Hospitality Management 310 (Consumer Service & Satisfaction)	5	
International Studies 501 (International Tourism)	5	
ENR 311 or ENR 340	3	
ENR 440 (Adventure Program Planning)	3	
ENR 441 (Ecotourism Programming Leadership)	3	
ENR 510 (Interpreting Natural History of Ohio)	5	
ENR 531 (Natural Resources Economics)	5	
ENR 601 (Environmental Impact Assessment)	4	
ENR 610 (Environmental Interpretation & Visitor Services)	5	certification available
ENR 613 (Methods for Environmental & Ecological Education)	5	certification available
ENR 647 (Wilderness Policy & Management)	4	
ENR 598 (Natural Resources Management Study Tour)	2-5	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Parks, Recreation and Tourism Major

Recommended Courses for Specialized Career Tracks:

Community Recreation Leadership & Management

Allied Med 425 (Critical Phases of Life)	3	
Educ PAES 245 (Sports & Recreation Leadership)	3	
Educ PAES 262 (Coaching the Young Athlete)	3	
Educ PAES 410 (History of Leisure & Physical Activities)	5	
Educ PAES 509 (Sport & Leisure Service Delivery & Promotion)	5	
Educ PAES 544 (Sport & Leisure Perspectives for Special Populations)	2	
Educ PAES 545 (Programming in Sport & Recreation)	3	
Educ PAES 630 (Problems in Intramural Sports)	5	
ENR 311 or ENR 340	3	
ENR 319 (Introduction to Forestry, Fisheries & Wildlife)	3	
ENR 510 (Interpreting Natural History of Ohio)	5	
* ENR 610 (Environmental Interpretation & Visitor Services)	5	certification available
ENR 613 (Methods for Environmental & Ecological Education)	5	certification available
ENR 598 (Natural Resources Management Study Tour)	2-5	

Additional ENR courses may be recommended by the faculty advisor.

Additional courses from disciplines outside of the School of Environment and Natural Resources may be selected in consultation with the faculty advisor.

** Indicates course is highly recommended for this career track.*

Work Experience & Internship Courses recommended for all Specialized Career Tracks

ENR 289 (Natural Resources Practicum)	2
ENR 684/689 (Natural Resources Internship)	4

Appendix C: Support and Concurrence Letters Requested



210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1085

Phone (614) 292-2265
Fax (614) 292-7432
<http://snr.osu.edu>

February 9, 2006

Dr. Morton O'Kelly
Chair
Department of Geography
1036 Derby Hall
150 North Oval Mall
CAMPUS

Dear Morton:

The School of Environment and Natural Resources currently supports an undergraduate major entitled "Human Dimensions in Natural Resources" (HDNR). This major includes options or tracks in "Ecological Communications and Education," "Integrated Resource Policy and Planning," and "Parks, Recreation and Tourism Administration." Prior to implementation of the HDNR major in 1999, the current options were separate majors with slightly different names. We have found over the past 5 years that the "Human Dimensions" title is confusing or obscure to most potential majors and their parents. We are also reducing our emphasis in the area of ecological communications and education except for components that are compatible with our Parks, Recreation and Tourism option.

Because of these issues, we are seeking to replace the current HDNR program with two majors; i.e., "Parks, Recreation and Tourism" and "Environmental Policy and Management." The proposed curricula are similar to those of the existing tracks in these areas; however, we are requesting some changes in our math and chemistry requirements to better serve this population of students. We believe the proposed majors, if approved, will help students more easily identify and prepare for social science based career opportunities that have traditionally been addressed by the School. I am writing to request support and concurrence from the Department of Geography for these changes to our curriculum.

If you have any questions regarding this proposal, please feel free to contact Dr. Neil Andrew, Chair of the School's Academic Affairs Committee, at 292-9789. *Request for Concurrence* forms are also enclosed for you convenience.

Sincerely,

A handwritten signature in cursive script, reading "Jerry M. Bigham".

Jerry M. Bigham
Professor and Director

Cc: N. Andrew, M. Giese, D. Eckert

<p align="center">SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE</p>
--

The purpose of this form is to provide external College/Department comment and concurrence to a proposed change to the academic curriculum within the SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES. A letter may be substituted for this form.

Academic units receiving this form are asked to response to Section B and return the form to the School of Environment and Natural Resources, 210 Kottman Hall, 2021 Coffey Road.

We seek to resolve an curriculum issues prior to forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Parks, Recreation and Tourism

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

Department of Geography

Date responses are needed: **March 1, 2006**

B. Information from academic units *reviewing* the request:

☐ The academic unit ***supports*** the proposal

☐ The academic unit ***does not support*** the proposal.
Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date

<p align="center">SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE</p>
--

The purpose of this form is to provide external College/Department comment and concurrence to a proposed change to the academic curriculum within the SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES. A letter may be substituted for this form.

Academic units receiving this form are asked to response to Section B and return the form to the School of Environment and Natural Resources, 210 Kottman Hall, 2021 Coffey Road.

We seek to resolve an curriculum issues prior to forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Environmental Policy and Management

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

Department of Geography

Date responses are needed: **March 1, 2006**

B. Information from academic units *reviewing* the request:

☐ The academic unit ***supports*** the proposal

☐ The academic unit ***does not support*** the proposal.
Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date



210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1085

Phone (614) 292-2265
Fax (614) 292-7432
<http://snr.osu.edu>

February 7, 2006

Dr. Jennifer Collis
School of Physical Activity and Educational Services
215 Pomerene Hall
1760 Neil Ave.
CAMPUS

Dear Jennifer,

Enclosed please find a copy of our proposal to change our "Human Dimensions in Natural Resources" undergraduate major. In essence, we are requesting to revise and reconstitute two previous undergraduate majors of the School under the titles, "Environmental Policy and Management" and "Parks, Recreation and Tourism."

The most significant changes to our existing Human Dimensions in Natural Resources (HDNR) major involve the integration of the "Ecological Communications & Education" option and the "Parks, Recreation & Tourism option" from the current major into one major to be titled, again, as "Parks, Recreation and Tourism." The "Integrated Resource Policy and Planning" option of the current HDNR major has also been retooled and will be re-established as one major to be titled, "Environmental Policy and Management." In addition to this curriculum re-organization, we have requested that our existing math and chemistry requirements be change to better serve these two new SENR majors and better match the needs of our social science students.

We believe the proposed majors, if approved, will help students more easily identify and prepare for social science based career opportunities related to environmental and natural resources issues. We seek your degree unit's concurrence for these changes to the SENR curriculum. Request for Concurrence forms for each major are enclosed as well.

If you have any questions regarding this proposal, please feel free to contact Dr. Neil Andrew, Chair, SENR Academic Affairs Committee or myself.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Giese".

Mark E. Giese
SENR Academic Administrative Officer

<p align="center">SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE</p>
--

The purpose of this form is to provide external College/Department comment and concurrence to a proposed change to the academic curriculum within the SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES. A letter may be substituted for this form.

Academic units receiving this form are asked to response to Section B and return the form to the School of Environment and Natural Resources, 210 Kottman Hall, 2021 Coffey Road.

We seek to resolve an curriculum issues prior to forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Parks, Recreation and Tourism

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

School of Physical Activity and Educational Services

Date responses are needed: March 1, 2006

B. Information from academic units *reviewing* the request:

☐ The academic unit *supports* the proposal

☐ The academic unit *does not support* the proposal.

Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date

<p align="center">SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE</p>
--

The purpose of this form is to provide external College/Department comment and concurrence to a proposed change to the academic curriculum within the SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES. A letter may be substituted for this form.

Academic units receiving this form are asked to response to Section B and return the form to the School of Environment and Natural Resources, 210 Kottman Hall, 2021 Coffey Road.

We seek to resolve an curriculum issues prior to forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Environmental Policy and Management

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

School of Physical Activity and Educational Services

Date responses are needed: March 1, 2006

B. Information from academic units *reviewing* the request:

☐ The academic unit *supports* the proposal

☐ The academic unit *does not support* the proposal.

Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date



210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1085

Phone (614) 292-2265
Fax (614) 292-7432
<http://snr.osu.edu>

February 7, 2006

Dr. Penny Reighart
College of Human Ecology
Campbell Hall
1787 Neil Ave.
CAMPUS

Dear Penny,

Enclosed please find a copy of our proposal to change our "Human Dimensions in Natural Resources" undergraduate major. In essence, we are requesting to revise and reconstitute two previous undergraduate majors of the School under the titles, "Environmental Policy and Management" and "Parks, Recreation and Tourism."

The most significant changes to our existing Human Dimensions in Natural Resources (HDNR) major involve the integration of the "Ecological Communications & Education" option and the "Parks, Recreation & Tourism option" from the current major into one major to be titled, again, as "Parks, Recreation and Tourism." The "Integrated Resource Policy and Planning" option of the current HDNR major has also been retooled and will be re-established as one major to be titled, "Environmental Policy and Management." In addition to this curriculum re-organization, we have requested that our existing math and chemistry requirements be change to better serve these two new SENR majors and better match the needs of our social science students.

We believe the proposed majors, if approved, will help students more easily identify and prepare for social science based career opportunities related to environmental and natural resources issues. We seek your degree unit's concurrence for these changes to the SENR curriculum. Request for Concurrence forms for each major are enclosed as well.

If you have any questions regarding this proposal, please feel free to contact Dr. Neil Andrew, Chair, SENR Academic Affairs Committee or myself.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Giese".

Mark E. Giese
SENR Academic Administrative Officer

<p align="center">SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE</p>
--

The purpose of this form is to provide external College/Department comment and concurrence to a proposed change to the academic curriculum within the SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES. A letter may be substituted for this form.

Academic units receiving this form are asked to response to Section B and return the form to the School of Environment and Natural Resources, 210 Kottman Hall, 2021 Coffey Road.

We seek to resolve an curriculum issues prior to forwarding this form and all other accompanying documentation to the Office of Academic Affairs.

A. Information from academic unit *initiating* the request:

Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Environmental Policy and Management

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

College of Human Ecology

Date responses are needed: **March 1, 2006**

B. Information from academic units *reviewing* the request:

☐ The academic unit ***supports*** the proposal

☐ The academic unit ***does not support*** the proposal.
Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date

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A. Information from academic unit *initiating* the request:

Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Parks, Recreation and Tourism

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

College of Human Ecology

Date responses are needed: **March 1, 2006**

B. Information from academic units *reviewing* the request:

☐ The academic unit ***supports*** the proposal

☐ The academic unit ***does not support*** the proposal.
Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date



210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210-1085

Phone (614) 292-2265
Fax (614) 292-7432
<http://snr.osu.edu>

February 7, 2006

Dr. Karlene Foster
Department of International Studies
3086 Derby Hall
154 N. Oval Mall
CAMPUS

Dear Karlene,

Enclosed please find a copy of our proposal to change our "Human Dimensions in Natural Resources" undergraduate major. In essence, we are requesting to revise and reconstitute two previous undergraduate majors of the School under the titles, "Environmental Policy and Management" and "Parks, Recreation and Tourism."

The most significant changes to our existing Human Dimensions in Natural Resources (HDNR) major involve the integration of the "Ecological Communications & Education" option and the "Parks, Recreation & Tourism option" from the current major into one major to be titled, again, as "Parks, Recreation and Tourism." The "Integrated Resource Policy and Planning" option of the current HDNR major has also been retooled and will be re-established as one major to be titled, "Environmental Policy and Management." In addition to this curriculum re-organization, we have requested that our existing math and chemistry requirements be change to better serve these two new SENR majors and better match the needs of our social science students.

We believe the proposed majors, if approved, will help students more easily identify and prepare for social science based career opportunities related to environmental and natural resources issues. We seek your degree unit's concurrence for these changes to the SENR curriculum. Request for Concurrence forms for each major are enclosed as well.

If you have any questions regarding this proposal, please feel free to contact Dr. Neil Andrew, Chair, SENR Academic Affairs Committee or myself.

Sincerely,

Mark E. Giese
SENR Academic Administrative Officer

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Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Parks, Recreation and Tourism

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

Department of International Studies

Date responses are needed: **March 1, 2006**

B. Information from academic units *reviewing* the request:

☐ The academic unit ***supports*** the proposal

☐ The academic unit ***does not support*** the proposal.
Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date

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Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Environmental Policy and Management

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

Department of International Studies

Date responses are needed: March 1, 2006

B. Information from academic units *reviewing* the request:

☐ The academic unit *supports* the proposal

☐ The academic unit *does not support* the proposal.
Please explain:

☐ The academic unit suggests:

Signature of Department Chair

Print Name

Date

Appendix D: Support and Concurrence Letter Responses



Department of Geography

1036 Derby Hall
154 North Oval Mall
Columbus, OH 43210-1361

Phone 614-292-2514
Fax 614-292-6213

Dr. Jerry M. Bigham
Director, School of Environment and Natural Resources
The Ohio State University
2021 Coffey Road
Columbus, Ohio 43210-1085

Dear Jerry,

In connection with your letter of February 9, 2006, requesting support and concurrence from the Department of Geography for a pair of name changes "Parks, Recreation and Tourism" and "Environmental Policy and Management" in your majors, I am pleased to report that my faculty and I are in agreement and concur with your proposal.

I circulated the memo to five faculty members closely associated with our *People, Society, and Environment* [PSE] track (mentioned in the proposal) and I read it myself. I feel that the change and clarification of the names to suit the best interests of your program are appropriate and do not infringe on our interests in related subject matter. Indeed we think that the clarification may help students to navigate the distinctive areas of specialization in each of our corresponding curricular structures. One comment that came up in supporting this is essentially a constructive suggestion: your faculty have clearly given some thought to the names of their tracks and curriculum, and in the ensuing review our faculty have built up a better understanding of the offerings in SENR. Now, we hope that your faculty might learn a bit more about the new and emerging strength in our faculty in the areas of PSE. As you know, this is an area in which we have chosen to invest a number of FTEs -- a serious commitment indeed.

We hope that the new found spirit of cooperation between our programs will lead us to be able to see mutually beneficial linkages in the near future, perhaps including some cross-advertising of the relevant materials and courses.

Sincerely,

Morton E. O'Kelly
Professor & Chair

cc: B. Mansfield
K. McSweeney
D. Porinchu
J. Wainwright
D. Munroe

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE

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Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Parks, Recreation and Tourism

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

College of Human Ecology

Date responses are needed: March 1, 2006

B. Information from academic units *reviewing* the request:

☒ The academic unit **supports** the proposal

☐ The academic unit **does not support** the proposal.
Please explain:

☒ The academic unit suggests:

*We suggest inclusion of development courses such as
HRS 361, 364 (which are GE sci courses). In preparation for
managing hospitality operations, our Hrs Mgt faculty request
clarification. Should some
Hrs Mgt courses be included?
Should Human Ntr 450 - Food Safety -
be included?*

Signature of Department Chair

Print Name

Date

Penelope Reighart

Penelope Reighart

Human Ecology

3/14/06

<p align="center">SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES REQUEST FOR ACADEMIC REVIEW AND CONCURRENCE</p>
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Initiating Academic Unit: SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Proposed Major: Environmental Policy and Management

Major to be replaced: Human Dimensions in Natural Resources

Effective Quarter/Year: Autumn Quarter 2006

Type of Request: ☐ New Major ☒ Revised Major ☐ New Minor ☐ Revised Minor

Academic Units with related interests asked to review the request:

College of Human Ecology

Date responses are needed: **March 1, 2006**

B. Information from academic units *reviewing* the request:

☒ The academic unit ***supports*** the proposal

☐ The academic unit ***does not support*** the proposal.
Please explain:

☒ The academic unit suggests:

We suggest the inclusion of development courses such as HDFS 361, 364 (which are GE S Sci courses).

Penelope Reighart
Signature of Department Chair

Human Ecology
Print Name

3/16/06
Date

Penelope Reighart



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

76

OFFICE OF THE ADMINISTRATOR
SCIENCE ADVISORY BOARD

January 5, 2005

School of Natural Resources
The Ohio State University
2021 Coffey Road
Columbus, OH 43210-1085

Dear Sir or Madam:

I am writing to indicate support for the proposed changes to the Human Dimensions Undergraduate Curriculum at the Ohio State University as they have been described to me by Dr. Joseph Arvai. Dr. Arvai currently serves as a consultant to the Science Advisory Board Staff Office.

The proposed changes seem well designed to strengthen the social and behavioral science aspects of the program.

EPA stands in need of graduates with a strong foundation in the social sciences for a suite of tasks associated with environmental policy and management. We need candidates who understand basic principles in the physical, chemical, and biological sciences and who bring sophisticated understanding of social science methods to the analysis of human behavior related to environmental policy. In hiring, we look for graduates of programs that have clearly identified specialty areas to strengthen analysis associated with environmental policy and management.

The Science Advisory Board has noted in recent activities reviewing proposals for EPA's science budget that the areas of economic, social and behavioral sciences have been historically underfunded. We expect stronger funding in these areas and increased need for graduates that would be trained in the curriculum described by Dr. Arvai for these developing intramural and extramural programs.

Sincerely,

A handwritten signature in cursive script that reads "Angela Nugent".

Angela Nugent, Ph.D.
Special Assistant/Designated Federal Officer



Recycled/Recyclable
Printed on paper that contains
at least 75% recycled fiber

Appendix E: Curriculum revision process timeline



HDNR Curriculum Revision Process Timeline – School of Natural Resources

In August and September, 2004, the SENR faculty began actively reviewing the direction that the School of Environment and Natural Resources should be going with revisions to the social science based natural resources majors currently being offered by the School. At their Autumn Quarter, 2004 Faculty Retreat, SENR faculty made a commitment to continue support for the social science based disciplines in the School.

A complete review of the current Human Dimensions in Natural Resources was then engaged. The Natural Resources Social Science faculty group began to examine the three specific options within the existing major. The Parks, Recreation and Tourism faculty began a review of the Parks, Recreation and Tourism Administration option (PRA) and the Ecological Communication and Education Option (ECE). At the same time, the Environmental Policy & Risk Communications faculty also began a review of the Integrated Resources Policy & Planning Option (IRP) and the Ecological Communications and Education Option (ECE) as well. Both of these faculty subgroups of the Natural Resources Social Science disciplines worked to develop draft templates and directions for revision of the current Human Dimensions in Natural Resources major.

Working with the SENR Academic Affairs Committee, these two faculty groups merged and defined curriculum templates for developing two separate natural resources social science based majors to be offered by the School of Environment and Natural Resources. These two majors were identified as:

Environmental Policy and Management

Parks, Recreation and Tourism

Dr. Tom Koontz and Dr. Joe Arvai provided primary leadership for development of the Environmental Policy & Management major. Dr. Neil Andrew provided primary leadership for development of the Parks, Recreation and Tourism major.

Input was sought throughout the development of these two new majors from students, alumni, stakeholders. The SENR Student Services Team helped to imbed SENR core requirements and GEC requirements into the new template structure and provided support for shaping aspects of the career track components common to the new majors.

Informal discussion among students and faculty regarding changes and potential revisions for the Human Dimensions in Natural Resources major continued through Autumn Quarter, 2004. Members of the School of Natural Resources Alumni Society (SNRAS)

also provided review and consultation in development of the two natural resources social science majors throughout Autumn Quarter, 2004.

In Winter Quarter, 2005, the SENR Academic Affairs committee brought forward to the SENR faculty the final templates for both new majors. On January 6, 2005, the SENR faculty met. The two majors were thoroughly presented and discussed at this meeting. A vote was taken to approved the new Environmental Policy & Management major (EPM) and the new Parks, Recreation & Tourism major replacing the Human Dimensions in Natural Resources major. Both curriculum revisions were approved. The vote was as follows: 18 votes in favor, 3 against, 3 abstentions.

In Early Spring, 2005, a student forum was conducted for SENR students sponsored by the School to provide another opportunity for our undergraduate students to actually see and review the two proposed majors and to provide additional comment on the direction that the new Natural Resources Social Science based majors should be pursued. Additional information provided by students and faculty attending this forum gave added insight and helped to tweak the supporting career tracks and faculty advising components necessary to support the two new majors.

The SNR Alumni Society was again consulted and provided review of the final curriculum revision at there July, 2005 meeting.

Final Documentation necessary for formal University approval and providing justification for the two new majors was assembled during Autumn Quarter, 2005.

In November, 2005, The School of Natural Resources was given approval by the University to change its name to the *School of Environment and Natural Resources*. An update to the final curriculum package for these two proposed majors was then completed to reflect this change as well.

Formal letters of concurrence and support have now been requested from various OSU departments. Additional letters of support have also been requested from external agencies, student groups, professional associations and other stakeholders as well. This additional documentation should be forthcoming shortly with release of this final curriculum package.

Submitted by,



Mark E. Giese
SNR School Secretary

12-3-05

Date