

**Date: Jan. 13, 2010**

**Subject: Environmental Citizenship Minor**

**From: James Fredal, Chair CCI Science Subcommittee**

The Sciences Subcommittee considered the proposal for a new Interdisciplinary Minor in Environmental Citizenship at its meetings of 11 December, 2009. Jessica Mercerhill provided background about the development of this proposal.

The Environmental Citizenship Minor will pursue three learning outcomes:

1. Students will construct a working definition of *environmental citizenship* built upon a “literacy model” that includes both understanding or “reading” and shaping or “writing” environments;
2. Students will identify various natural, social/political, and cultural forces that shape and are shaped by environments and their relation to one another;
3. Students will explore ethical, sustainable options for shaping environments.

In fulfilling these three expected learning outcomes, completion of the minor will “help prepare students to participate knowledgeably in discussions of the physical, biological, social, political, historical, and cultural forces that shape environments and to assume an active role in shaping environments by engaging in public debate, personal action, and artistic expression” (“Proposal”, pg.2)

The minor will require completion of at least 25 credit hours; these include:

- 1) Five credit hours in each of three foundational categories: Sciences, Social Sciences, and Arts and Humanities. Each category includes 4-5 courses; courses range from the 200- to 500-level. These courses must be taken outside the major.
- 2) A capstone course, Geography/ English 597.03 in Environmental Citizenship.
- 3) A set of electives to finish the coursework for the minor. Electives include a range of courses across the curriculum, including courses in all three of the foundational categories.

The committee considered the minor to be a timely and important addition to the offerings in the Arts and Sciences interdisciplinary minor program.

Subsequent discussion by the Subcommittee concentrated on two topics:

- 1) Questions about the selection of courses under the “Arts and Humanities” category: committee members wondered why these two courses, Art 300: Introduction to Photography (5crs) and Art 353: Art of Podcasting (5 crs) were included in the minor but other courses in creative production (for example, creative writing, news writing, or web design) were not.
- 2) Questions about the environmental content of the foundational course, CS 272: Science and Society, which seems to be only tangentially related to the two core concepts of environment and citizenship.

In response to questions from the Sciences Subcommittee, the proposal committee responded on 7 January:

- 1) The Arts courses were specifically chosen because they offer students techniques and methods for social critique, digital reproduction, self-publishing and distribution in addition to methods for artistic expression. The proposal committee felt that this specific set of skills and techniques were a crucial element of “citizenship.” The Art 300 photography course includes lessons and assignments in documentary photography and the Art 353 Podcasting course teaches students how to participate in public dialogue by creating and publishing videos, photos and writing on their own blogs. At a time when online publishing is rivaling traditional print media, it is important for artists, writers, environmentalists, citizens—and anyone with ideas they want to distribute—to develop the skills to create their own online media.

2) The second concern was not addressed by the proposal committee. The Sciences subcommittee did note that the other core courses (in all categories) were centrally focused on environmental issues, and that the CS 272 did seem appropriate as a foundational course in preparing students to understand the nature and role of scientific knowledge in contemporary debates about the environment.

Given the nature of the subcommittee's concerns—they were queries more than objections—and given the responses of the proposing committee, the proposal is being forwarded as approved to the CCI for its consideration.

**The Ohio State University  
Arts and Sciences  
Interdisciplinary Studies**

**Environmental Citizenship Minor (xxxxxx-MN)**

Arts and Sciences

<http://artsandsciences.osu.edu>

Please see an advisor in Arts and Sciences Advising and Academic Services in 100 Denney Hall to declare the minor.

By providing students with an interdisciplinary grounding in environmental studies, the minor will help prepare students to participate knowledgeably in discussions of the physical, biological, social, political and cultural forces that shape environments and to assume an active role in shaping environments by engaging in public debate, personal action, and artistic expression.

The minor requires the completion of 25 hours. Students must successfully complete 3 required foundational courses, one from each category, and a capstone course. The remaining hours may be taken from a range of elective courses.

**Capstone Course**

English/Geography 597.03 Environmental Citizenship (5)

**Foundational Science Courses: Choose one**

ES 203 Environmental Geoscience (5)

Geog 210 Physical Geography and Environmental Issues (5)

ENR 201 Introduction to Environmental Science (5)

EEOB 503 Ecology (5)

**Foundational Social Science Courses: Choose one**

Geog 430 Geographical Perspectives on Environment and Society (5)

ENR 203 Society and Natural Resources (5)

Soc 460 Environmental Sociology (5)

Poli Sci 559 International Environmental Politics (5)

**Foundational Arts and Humanities Courses: Choose one**

Comp Stds 272 Science and Society (5)

Hist 366.01 Global Environmental History (5)

Hist 366.02 American Environmental History (5 crs)

ENR 347 Religion & Environmental Values in America (5)

**Phil 533 Environmental Ethics (5)**

**Electives: (Choose 5 crs hrs)**

**SCIENCE PERSPECTIVES**

AGSYSMGT 370 (3) ENR 319 (5)

AGSYSMGT 550 (3) ENR 355 (3)

ES 203 (5) EEOB 210 (5)

ES 204 (5) EEOB 322 (5)

ES 210 (5) EEOB 370 (3)

ES 411 (5) EEOB 502 (4)

ES 425 (5) EEOB 503 (5)

ES 550 (5) EEOB 505 (5)

ES 583 (3) EEOB 511 (3)

ES 584 (3) Geog 210 (5)

ES 663 (5) Geog H410 (5)

ENE 511 (3) Geog 420 (5)

ENE 610 (3) Geog 490 (5)

ENR 201 (5) Geog 520 (5)

ENR 300.01 (3)

**SOCIAL SCIENCE PERSPECTIVES**

AED Econ 280 (5)

AED Econ 531 (5)

(cross listed with ENR 531)

AED Econ 532 (5)

AED Econ 565 (cross-listed with Intl Std: 565)

AED Econ 597.01 (5)

Anthrop 411 (5)

Anthrop H597.03 (5)

Anthrop 602.03 (5)

Anthrop 610 (5)

ENR 203 (5)

ENR 311 (3)

ENR 340 (3)

ENR 400 (4)

Geog 430 (5)

Geog 470 (5)

Geog 597.02 (5)

Geog 605 (5)

Geog 630 (5)

Geog 635 (5)

Geog 655 (5)

Intl Stds 280 (5)

(cross-listed with AED Econ 280)

Intl Stds 565 (5)

(cross-listed with AED Econ 565)

Poli Sci 210 (5)

Poli Sci 305 (5)

Poli Sci 541 (5)

Poli Sci 551 (5)

Poli Sci 556 (5)

Poli Sci 559 (5)

Poli Sci 580 (5)

Soc 302 (5)

Soc 460 (5)

Soc 597.02 (5)

**ARTS & HUMANITIES  
PERSPECTIVES**

Art 300 (5)

Art 353 (5)

ENR 347 (5)

Hist 366.01(5)

Hist 366.02 (5)

Comp Stds 272 (5)

Comp Stds 367.02 (5)

Comp Stds 597.01 (5)

Philo 230 (5)

Philo 338 (5)

Philo 431 (5)

Philo 533 (5)

Poli Sci 571 (5)

**Arts and Sciences minor program guidelines**

The following guidelines govern this minor.

200-level coursework At least half of the hours at for a minor should be taken at the upper-division level. (300 level or above and all courses taught by the College of mathematical and Physical Sciences at the 200 level)

Required for graduation No

Credit hours required A minimum of 25

Transfer credit hours allowed A maximum of 10

Overlap with the GEC Permitted

Overlap between minors Each minor completed must contain 20 unique hours.

Grades required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative point-hour ratio required for the minor.
- Course work graded Pass/Non-Pass cannot count on the minor.

Approval required The minor program description sheet indicates if the minor course work must be approved by:

- The academic unit offering the minor, or
- A college/school counselor.

Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by:

- The academic unit offering the minor, or
- A college/school counselor

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ASC Curriculum Office <http://artsandsciences.osu.edu/>  
The Ohio State University  
4132 Smith Lab, 174 W. 18<sup>th</sup> Ave.  
KMH1/13/10

# **Proposal for an Interdisciplinary Environmental Citizenship Minor**

## **Arts and Sciences**

### **Development Committee:**

Edwin Scott Bair  
Paul Bellair  
Jerry Bigham  
Caroline Breitenberger  
Donald Eckert  
Mark Giese  
Stephanie Glass  
Terry Gustafson  
Fredrick Hizhusen  
Greg Hizhusen  
Joe Holomuzki  
Richard Jagacinski  
Tomas Koontz  
Lawrence Krissek  
William Macdonald  
Becky Mansfield  
Jessica Mercerhill  
Jill Pfister  
Gregory Rose  
John Snyder  
Alexander Thompson  
Lewis Ulman  
Mohan Wali  
Amy Youngs  
Norah Zuniga-Shaw

## **Proposal for an Interdisciplinary Environmental Citizenship Minor**

This proposal is to establish a new undergraduate minor in Environmental Citizenship. The goal of this interdisciplinary minor is to provide students with a broad-based understanding of environmental change and problems. Student Learning Outcomes for this minor as are follows:

1. Students will construct a working definition of *environmental citizenship* built upon a “literacy model” that includes both understanding or “reading” and shaping or “writing” environments;
2. Students will identify various natural, social/political, and cultural forces that shape and are shaped by environments and their relation to one another;
3. Students will explore ethical, sustainable options for shaping environments.

By providing students with an interdisciplinary grounding in environmental studies, the minor will help prepare students to participate knowledgeably in discussions of the physical, biological, social, political, historical, and cultural forces that shape environments and to assume an active role in shaping environments by engaging in public debate, personal action, and artistic expression.

This field by its very nature is interdisciplinary, encompassing such disciplines as art, earth sciences, environmental and natural resources, geography, history, political science, and sociology.

Although majors and minors focusing on the environment may be found housed in many departments across campus, this minor is unique in developing a cross-departmental minor that focuses on human-environment interaction.

### **Development of the Minor**

The development of this minor arose from faculty interest. A core group of faculty with similar interests was brought together at the request of a few faculty members. After this initial group met to establish that there was a significant interest, notices of further development meetings were sent to additional faculty and chairs of academic units who were thought to have possible interest in the area. Faculty from the following academic units participated in the development of the minor: Agricultural, Environmental and Developmental Economics; Art; Biochemistry; Dance; Earth Sciences; English; Entomology, Environment and Natural Resources; Evolution, Ecology and Organismal Biology; Geography; Philosophy; Political Science; Psychology; Public Policy and Management; and Sociology. Comments and suggestions were solicited from the chairs of all academic units with courses listed on the curriculum, and involvement was encouraged from throughout the Arts and Sciences and other colleges on campus. The proposal was shared with various student groups and feedback solicited. Students responded positively to the proposal.

### **Curriculum**

The proposed undergraduate minor in Environmental Citizenship requires completion of a minimum of 25 credit hours. Students must successfully complete three foundational courses, a capstone course, and elective courses to reach the minimum hours.

**Foundational Courses:**

Students must complete three foundational courses from three categories of courses: Science, Social Science, and Arts and Humanities. In addition, to ensure that the minor complements the major and does not duplicate it, students must take courses outside of the major.

**Capstone Course:**

All students are required to take the cross-listed course, English/Geography 597.03 Environmental Citizenship (5 crs).

**Foundational Science Courses: Choose one (5 crs)**

ES 203	Environmental Geoscience (5 crs)
Geog 210	Physical Geography and Environmental Issues (5 crs)
ENR 201	Introduction to Environmental Science (5crs)
EEOB 503	Ecology (5 crs)

**Foundational Social Science Courses: Choose one (5 crs)**

Geog 430	Environment and Society (5 crs)
ENR 203	Society and Natural Resources (5 crs)
Poli Sci 559	International Environmental Politics (5crs)
Soc 460	Environmental Sociology (5 crs)

**Foundational Arts and Humanities Courses: Choose one (5 crs)**

Comp Stds 272	Science and Society (5 crs)
ENR 347	Religion and Environmental Values in America (5 crs)
Hist 366.01	Global Environmental History (5 crs)
Hist 366.02	American Environmental History (5 crs)
Phil 533	Environmental Ethics (5 crs)

**Electives: (Choose 5 crs hrs)****SCIENCE PERPSECTIVES****Agricultural Systems Management**

AGSYSMGT 370	Principles of Hydrology (3 crs)
AGSYSMGT 550	Pollution Control and Waste Utilization (3 crs)

**Earth Sciences**

ES 203	Environmental Geoscience (5 crs)
ES 204	Exploring Water Resources (5 crs)
ES 210	Energy, Mineral Resources, and Society (5 crs)
ES 411	Water Security for the 21 <sup>st</sup> Century (5 crs)
ES 425	Peak Oil and Sustainability (5 crs)
ES 550	Geomorphology (5 crs)
ES 583	Field Geology for Educators (3 crs)
ES 584	Principles of Oceanography for Educators (3 crs)

ES 663                      Global Change and Sustainability in the Earth System (5 crs)

#### Environmental Engineering

ENE 511                      Introduction to Environmental Engineering (3 crs)  
ENE 610                      Analysis of Natural and Polluted Waters (3 crs)

#### Evolution, Ecology, and Organismal Biology

EEOB 210                      Local Flora (5 crs)  
EEOB 322                      Introduction to Ornithology (5 crs)  
EEOB 370                      Extinction (3 crs)  
EEOB 502                      Plants and People (4 crs)  
EEOB 503                      Ecology (5 crs)  
EEOB 505                      Marine Biology and Ecology (5 crs)  
EEOB 511                      Local Flora for Teachers (3 crs)

#### Geography

Geog 210\*                      Physical Geography and Environmental Issues (5 crs)  
Geog H410                      Global Change and Environmental Change (5 crs)  
Geog 420                      Global Climate Change: Causes and Consequences  
Geog 490                      Biogeography: An Introduction to Life on Earth (5 crs)  
Geog 520                      Climatology (5 crs)

#### Environmental and Natural Resources

ENR 201                      Introduction to Environmental Science (5crs)  
ENR 300.01                      Soil Science (3 crs)  
ENR 319                      Introduction to Forestry, Fisheries, and Wildlife (3 crs)  
ENR 355                      Water Quality Management (3 crs)

### **SOCIAL SCIENCE PERSPECTIVES**

#### Agricultural, Environmental, and Developmental Economics

AED Econ 280                      Feast or Famine: The Global Business of Food (5 crs) (crosslisted with International Studies 280)  
AED Econ 531                      Environmental and Natural Resources Economics (5 crs) (crosslisted with Environmental and Natural Resources 531)  
AED Econ 532                      Food Security and Globalization (5 crs)  
AED Econ 565                      Global Climate Change: Economic Implications and Opportunities (5 crs) (crosslisted with Intl Stds 565)  
AED Econ 597.01                      Problems and Policies in World Population, Food, and Environment (5 crs)

#### Anthropology

Anthrop 411                      Human Ecological Adaptations (5 crs)  
Anthrop H597.03                      The Prehistory of Environment and Climate (5crs)  
Anthrop 602.03                      Environmental Archaeology (5 crs)  
Anthrop 610                      Ethnobotany (5 crs)



Geography

Geog 430	Environment and Society (5 crs)
Geog 470	Life and Death Geographies: Global Population Dynamics (5 crs)
Geog 597.02	Integrated Earth Systems: Confronting Global Change (5 crs)
Geog 605	New Worlds of Latin America (5 crs)
Geog 630	Environmental Conservation (5 crs)
Geog 635	Globalization and Environment (5 crs)
Geog 655	Land Use Geography (5 cr)

International Studies

Intl Stds 280	Feast or Famine: The Global Business of Food (5 crs) (crosslisted with AED Econ 280)
Intl Stds 565	Global Climate Change: Economic Implications and Opportunities (5 crs) (crosslisted with AED Econ 565)

Environmental and Natural Resources

ENR 203	Society and Natural Resources (5 crs)
ENR 311	Foundations for Environmental Communications, Education and Interpretation (3 crs)
ENR 340	Concepts of Parks and Recreation (3 crs)
ENR 400	Natural Resources Policy (4 crs)

Political Science

Poli Sci 210	Introduction to Political Theory (5 crs)
Poli Sci 305	Introduction to Public Policy (5 crs)
Poli Sci 541	Politics of the Developing World (5 crs)
Poli Sci 551	The United Nations System in Global Problem Solving (5 crs)
Poli Sci 556	Global Governance (5 crs)
Poli Sci 559	International Environmental Politics (5 crs)
Poli Sci 580	State and Economy (5 crs)

Sociology

Soc 302	Technology and Global Society (5 crs)
Soc 460	Environmental Sociology (5 crs)
Soc 597.02	World Population Problems (5 crs)

**ARTS & HUMANITIES PERSPECTIVES**Art

Art 300	Introduction to Photography (5crs)
Art 353	Art of Podcasting (5 crs)

Comparative Studies

Comp Stds 272	Science and Society (5 crs)
Comp Stds 367.02	Science and Technology in American Culture (5 crs)
Comp Stds 597.01	Global Studies of Science and Technology (5 crs)

Environmental and Natural Resources

ENR 347	Religion and Environmental Values in America (5 crs)
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History

Hist 366.01	Global Environmental History (5 crs)
Hist 366.02	American Environmental History (5 crs)

Philosophy

Phil 230	Introduction to Political and Social Philosophy (5 crs)
Phil 338	Philosophical Problems in Law (5crs)
Phil 431	Ethical Theory (5 crs)
Phil 533	Environmental Ethics (5 crs)

Political Science

Poli Sci 571	Political Theories of Democracy (5 crs)
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See Appendix D for sample syllabi.

**Research Participation**

Students are encouraged to pursue research experiences in the area of environmental citizenship. 3 to 5 credit hours of 699, 693 or H783 credit may be used to fulfill the elective requirement. Research experiences must be approved for the minor by a member of the Faculty Advisory Committee. Alternatively, students may choose elective courses from any category.

**Administration and Advising**

The minor will be listed in the OSU Bulletin as “an interdisciplinary minor offered through Arts and Sciences.” An interdisciplinary Faculty Advisory Committee will be formed with representatives from the major departments offering coursework within the minor and will include a representative from the university academic advising community. The Committee will be appointed by the Executive Associate Dean of Arts and Sciences according to the guidelines approved for interdisciplinary programs by the Colleges of the Arts and Sciences Committee on Curriculum and Instruction (CCI). This committee will evaluate the minor curriculum and course offerings and meet at least once per year in order to make recommendations to a CCI Subcommittee regarding policy rules, the addition of courses to the minor, student learning outcome assessment, and the status of the minor. The CCI will have curricular oversight of the program.

Advising will be done by professional departmental advisors, in conjunction with Arts and Sciences advisors, as well as participating faculty. Program materials will be available through the Office of Interdisciplinary Programs within Arts and Sciences, the Arts and Sciences Curriculum Office, and through the interdisciplinary program website of the Colleges of the Arts and Sciences. Advisors will be provided with any needed education regarding the requirements of the minor and the selection of courses. Students will be able to declare this minor with their advisors and DARS will be used to complete degree certification. Research coursework will be

approved by the Faculty Advisory Committee and applied by college advisors as an appropriate substitution for DARS.

### **Enrollment Projection**

It is expected that this minor will be attractive to a wide variety of majors. It is expected that students majoring within anthropology; biology; comparative studies; education; evolution, ecology, and organismal biology; earth sciences; environment and natural resources; philosophy; psychology, and sociology will show particular interest.

The minor will be advertised to students via several ways: through the creation of a minor requirement sheet maintained by the Arts and Sciences Curriculum Office, which will be circulated to advisors and relevant faculty, through the posting of curricular information on the Office of Interdisciplinary Programs within the Arts and Sciences website, and through establishing links on participating departments' websites. It is expected that the minor will initially attract a total of 20-25 students and grow to attract 45-50 students within five years. The Faculty Advisory Committee will monitor growth of student participation in the minor and make recommendations about possible increases in seat availability, if needed.

### **Resources and Expenses**

Current facilities and staff resources are adequate to support this minor. The interdisciplinary cooperation of units allows students to benefit from the resources that exist in disparate units in such a way that enhances the networking amongst units.

The establishment of the minor necessitates the creation of a new foundational course. The course will be cross-listed in multiple units. It is proposed that the units with significant teaching responsibilities in any one quarter will cross-list the course and claim appropriate enrollment in the course. Revenues generated by the course will flow back to the units with substantial teaching load and should ensure adequate resources for the continued offering of the foundational course. The research experiences will make use of existing resources within academic units. As the other minor curricular requirements can be delivered by existing coursework, current faculty levels are seen as adequate to staff the courses. As the minor assists in connecting interested students to specific courses, it is expected that new courses may be developed as there will be a body of students to populate them. Our current budgetary system should reinforce the development of new courses as the interested student body grows. See Appendix A for a listing of faculty who regularly teach courses and conduct research in this area.

### **Competitiveness With Other Institutions**

Within Ohio, this program will be unique in its interdisciplinary focus and, therefore, adds to the curricular offerings at the undergraduate level in Ohio.

There are few programs at our peer institutions as well. They include the following:  
Northwestern University: Environmental Policy and Culture Minor

Penn State University: Environmental Inquiry Minor

UCLA: Environmental Systems and Society Minor

### **Administrative Support for the Minor**

The establishment of this minor is supported at various levels. During its creation, it had the support of the Executive Dean of Arts and Sciences, Joan Leitzel. Additional program concurrence and support has been obtained from many academic units and administrators (see Appendix C).

### **Implementation Date**

The minor in Environmental Citizenship is proposed for implementation in Spring Quarter 2010.

### **Student Learning Assessment**

#### **Learning Goals:**

1. Students will construct a working definition of *environmental citizenship* built upon a “literacy model” that includes both understanding or “reading” and shaping or “writing” environments;
2. Students will identify various natural, social/political, and cultural forces that shape and are shaped by environments and their relation to one another;
3. Students will explore ethical, sustainable options for shaping environments.

#### **Assessment Plan:**

1. Enrollment will be evaluated, as possible, on both the program and course levels on a yearly basis. On a program level, the number of students enrolled in the minor will be tracked. Additional student information, such as student major, honors and scholar affiliation, course selection, and performance in the minor will be assessed. At a course level, enrollment and seat availability in specific minor courses will be evaluated. Possible barriers to completing the minor in a timely fashion may be shown by enrollment trends. As students may not declare their minor until application for graduation, retrospective data will be collected and compared to data collected on a quarterly and annual basis.
2. As enrollments increase, assessment will move to a survey of graduating minors, again stressing of attainment of the above goals, and the structure, availability and sequencing of courses in the minor.
3. Student feedback regarding curricular content of courses will be solicited, especially in courses that are selected by the majority of students for use in the minor.

#### **Dissemination:**

The assessment will be supervised by the Office of Interdisciplinary Programs and the results will be used for considering improvements in the minor program. The Office of Interdisciplinary

Programs also will summarize the results, along with any plans for changes and improvements in the minor, as a report to be distributed to the Arts and Sciences Curriculum Subcommittee A, the minor oversight committee, and to the faculty and academic units participating in the minor.

**APPENDIX A: FACULTY**

Faculty listed below have research and/or teaching interests in Environmental Citizenship or related disciplines at The Ohio State University. (This is not intended to be a complete listing.)

Ola Ahlquist	Geography, Assistant Professor
Edwin Scott Bair	Earth Sciences and Civil; Envir Engr & Geod Sci, Professor
Paul Bellair	Sociology, Associate Professor
Jerry Bigham	Sch of Environ & Natural Res, Director-Tenure Init Unit
Jason Box	Geography, Associate Professor
Carline Breitenberger	Ctr for Life Science Education, Associate Dean; Biochemistry Admin, Associate Professor
David Bromwich	Geography, Professor
Donald Eckert	Sch of Environ & Natural Res, Professor; Assoc Dir-Tenure Init Unit
Mark Giese	Sch of Environ & Natural Res, School Secretary; Adjunct Instructor
Stephanie Glass	FCOB Mgmt & Human Resources, Lecturer-BE
Fredrick Hitzhusen	Agric, Evrnml & Dev Econ; Internatnl Prog in Agriculture, Faculty Emeritus
Jay Hobgood	Geography, Associate Professor; Director-Tenure Init Unit
Joe Holomuzki	Mansfield Campus, Associate Professor
Richard Jagacinski	Psychology; Industl, Weld & System Engr, Professor
Tomas Koontz	Sch of Environ & Natural Res; John Glenn Schl Public Affairs, Associate Professor
Lawrence Krissek	Earth Sciences, Associate Professor
Jialin Lin	Geography, Assistant Professor
Desheng Liu	Statistics; Geography, Assistant Professor
William Macdonald	Nwk-Dean/Director, Dean
Becky Mansfield	Geography, Associate Professor
Bryan Mark	Geography, Assistant Professor
Kendra McSweeney	Geography, Associate Professor
Ellen Mosley-Thompson	Geography, Professor
Darla Munroe	Geography; Agric, Evrnml & Dev Econ, Assistant Professor
David Porinchu	Geography, Assistant Professor
Jeff Rogers	Geography, Professor
Gregory Rose	Marion Campus, Dean; Geography, Associate Professor
John Snyder	Lima Campus, Dean; SAMP-School Allied Med Prof, Professor
Alexander Thompson	Political Science, Assistant Professor
Lewis Ulman	English, Associate Professor
Joel Wainwright	Geography, Assistant Professor
Mohan Wali	Sch of Environ & Natural Res; John Glenn Schl Public Affairs, Professor
Ningchuan Xiao	Geography, Assistant Professor
Amy Youngs	Art, Associate Professor
Norah Zuniga-Shaw	Dance, Assistant Professor

**APPENDIX B: Prerequisites for Courses**

Prerequisites may be waived or alternate substitutions may be accepted by instructors so students should check with advisors or faculty if this is possible.

AED Econ 532	200 or Econ 200
AED Econ/IS 597.01	SR standing
Anthrop 411	200
Anthrop 610	One course in anthrop or plnt bio at the 200 level or above
ASM 370	Math 148, Physics 103 or (preferred) Physics 111 or 131
EEOB 210	Bio 114
EEOB 322	Bio 114
EEOB 370	5 hours of biological sciences work
EEOB 503	413.01 or 503.01
EEOB 511	JR standing
ENE 511	Chem 122 or 125 and Math 152
ENE 610	Chem 122 or 125 and Math 152
ENR 311	201 and 203
ENR 319	201 and 203
ENR 400	201 and 203
ES 203	100 or 121
ES 204	100 or 105 or 121
ES 210	100 or 121
ES 411	GEC data analysis course; soph standing and above
ES 425	GEC data analysis course; soph standing and above
ES 550	122 or Geol Sci 122
ES 583	100
ES 584	15 hours in physical or biological sciences
ES 663	SR standing in ES or permission of instructor
Geog 655	240
Geog 670	240
Phil 230	English 110 or 111 or equiv.
Phil 431	Major or 15 hours of Philosophy course work
Poli Sci 571	210 or philos course work numbered 200 or higher
Soc 597.02	5 hours of social science course work

**APPENDIX C:**

**Program Concurrence Responses:**

**Anthropology**  
**Arts: Art Education, Music**  
**Chemistry**  
**City and Regional Planning**  
**Civil and Environmental Engineering and Geodetic Science**  
**Comparative Studies**  
**Earth Sciences**  
**English**  
**Environment and Natural Resources**  
**Evolution, Ecology and Organismal Biology**  
**Fisher College of Business**  
**Food, Agriculture and Environmental Sciences**  
**History**  
**Philosophy**  
**Political Science**

**Concurrences sought with no response (and therefore assumed):**

**Art**  
**Biochemistry**  
**Computer Science and Engineering**  
**Education and Human Ecology**  
**Entomology**  
**International Studies**  
**Microbiology**  
**Molecular Genetics**  
**Plant Cellular and Molecular Biology**  
**Physics**



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**From:** Clark S. Larsen [mailto:larsen.53@osu.edu]  
**Sent:** Thursday, March 05, 2009 1:23 PM  
**To:** Jessica Mercerhill  
**Subject:** Re: Concurrence Request for Environmental Citizenship Minor Proposal

Hi Jessica--

This looks terrific. You have Anthropology's full support and interest.

Best regards,

Clark Larsen

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**From:** Edward Adelson <[adelson.3@osu.edu](mailto:adelson.3@osu.edu)>  
**Date:** March 5, 2009 1:35:21 PM EST  
**To:** Valarie Williams <[mockabee.1415@osu.edu](mailto:mockabee.1415@osu.edu)>  
**Subject:** RE: Concurrence Request for Environmental Citizenship Minor Proposal

Fine from my end,  
Ed

**From:** Patricia Stuhr <[stuhr.1@osu.edu](mailto:stuhr.1@osu.edu)>  
**Date:** March 6, 2009 12:54:14 PM EST  
**To:** Valarie Williams <[mockabee.1415@osu.edu](mailto:mockabee.1415@osu.edu)>  
**Cc:** [wyszomirski.1@osu.edu](mailto:wyszomirski.1@osu.edu), [wpLDE@aol.com](mailto:wpLDE@aol.com)  
**Subject:** Re: Fwd: Concurrence Request for Environmental Citizenship Minor Proposal

No problem on my part.  
Pat

At 12:09 PM 3/5/2009, you wrote:

Hi Pat, Margaret, Wayne, and Ed,

I think we don't need to concur, but I just wanted to check with you all since it deals with citizenship.

Thanks,

Valarie Williams

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**From:** chisholm [mailto:chisholm@chemistry.ohio-state.edu]  
**Sent:** Saturday, March 28, 2009 10:10 AM  
**To:** Jessica Mercerhill  
**Subject:** RE: Concurrence Request for Environmental Citizenship Minor Proposal

We in chemistry have no problem with this proposal.  
Malcolm

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**From:** JENNIFER COWLEY [mailto:cowley.11@osu.edu]  
**Sent:** Thursday, March 05, 2009 12:56 PM  
**To:** Ed McCaul; Jessica Mercerhill  
**Subject:** Re: FW: Concurrence Request for Environmental Citizenship Minor Proposal

I'm commenting on behalf of City and Regional Planning regarding the Environmental Citizenship Minor. I'm concerned with the title. The selection of courses does not indicate citizenship. A title such as Environmental Studies would seem a much better fit with the selection of courses described.

Sincerely,  
Jennifer Evans-Cowley, PhD, AICP  
Associate Professor and Section Head  
City and Regional Planning  
Austin E. Knowlton School of Architecture  
The Ohio State University  
275 West Woodruff Avenue  
Columbus, OH 43210-1138  
(614) 292-5427  
cowley.11@osu.edu

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**From:** Carolyn J. Merry [mailto:merry.1@osu.edu]  
**Sent:** Tuesday, March 24, 2009 10:23 AM  
**To:** Jessica Mercerhill  
**Cc:** 'Ed McCaul'  
**Subject:** RE: Concurrence Request for Environmental Citizenship Minor Proposal

Jessica,

I had several of our environmental engineering faculty review the environmental citizenship minor proposal. This is a minor that could potentially appeal to Civil Engineering and Environmental Engineering students in our program, allowing them to enhance their knowledge on the humanities and policy side. We would support the minor, but suggest that you add the following courses to the list of electives (the pre-reqs for these courses are not too great). There are courses on pollution control and hydrology from FAES in the list, so we propose that students should be given a choice for these type of courses.

I would request that you add the following courses to the list of electives:

Environmental Engineering 511 Introduction to Environmental Engineering (pre-reqs Chem 122 or 125, Math 152)  
Environmental Engineering 610 Analysis of Natural and Polluted Water (Chem 125 or 205 and Math 152, or equivalent)

Carolyn Merry  
Chair, Civil and Environmental Engineering and Geodetic Science

Associate Dean and Honors Director, College of the Arts  
Director, OSU Urban Arts Space

152 Hopkins Hall  
128 N. Oval Mall  
Columbus, OH 43210

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**From:** Julia Watson [mailto:watson235@humanities.osu.edu]  
**Sent:** Tuesday, March 17, 2009 3:58 PM  
**To:** Jessica Mercerhill  
**Cc:** gene holland (holland.1@osu.edu)  
**Subject:** RE: Concurrence Request for Environmental Citizenship Minor Proposal

Jessica,

I'm concerned that for the Environmental Citizenship minor  
ENR 347 Religion and Environmental Values in America (5 crs)  
which has received a non-concurrence from Comp. Studies, is listed prominently in this proposed minor  
AND listed as an Arts & Hums course, which it is not.

This would seem to need correcting.

Julia

Julia Watson  
Associate Dean for Curriculum and Administration  
College of Humanities

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**From:** Lawrence Krissek [mailto:krissek@mps.ohio-state.edu]  
**Sent:** Thursday, March 26, 2009 1:25 PM  
**To:** Jessica Mercerhill  
**Cc:** frank@geology.ohio-state.edu; andereck@mps.ohio-state.edu  
**Subject:** RE: Concurrence Request for Environmental Citizenship Minor Proposal

Hi Jess,

I am writing on behalf of the School of Earth Sciences, expressing our concurrence with the proposed Environmental Citizenship minor. We look forward to contributing to this minor, and see it as a valuable model for an interdisciplinary approach to curricular programs dealing with the environment. Thanks for your help in developing this minor.

Best,  
Larry

Lawrence Krissek  
Associate Director for Administration  
School of Earth Sciences, OSU

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**From:** Tomas Koontz [mailto:koontz.31@osu.edu]  
**Sent:** Monday, April 20, 2009 4:29 PM  
**To:** Jessica Mercerhill  
**Cc:** giese.1@osu.edu; bigham.1@osu.edu  
**Subject:** Re: Environmental Citizenship 4/28 documents

Hi Jess,

As chair of the School of Environment and Natural Resources Academic Affairs Committee, I have discussed the proposed Environmental Citizenship minor with faculty and staff in our School. I am happy to provide concurrence for the proposed minor.

I realize that the new minor needs to strike a balance between focusing students into particular areas, and allowing the inclusion of a wide array of courses. I think the current proposal strikes a nice balance in this regard, with the Foundational courses as they are listed plus the array of elective courses. Although nearly every course that we teach in Environment and Natural Resources could arguably appear on the elective lists, we are happy with the current configuration as a whole.

Sincerely,  
-Tom Koontz

Tom Koontz, Associate Professor  
Chair, Academic Affairs Committee  
School of Environment and Natural Resources  
The Ohio State University  
210 Kottman Hall  
2021 Coffey Rd.  
Columbus, OH 43214  
<http://senr.osu.edu/facview.asp?id=1797>




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**Department of English**

164 West 17th Avenue  
Columbus, OH 43210-1370

Phone: (614) 292-6065  
Fax: (614) 292-7816

March 25, 2009

RE: Concurrence Request for Environmental Citizenship Minor Proposal

The Department of English concurs that the proposed minor in environmental citizenship is a substantive and much needed addition to the undergraduate curriculum. To my knowledge, this minor represents the first *programmatic* recognition at OSU that the humanities—and English studies in particular—have something valuable to contribute to environmental studies. All students pursuing the minor will be required to take the capstone course, English 597.03 / Geography 597.03. As the capstone course for the Arts and Sciences Environmental Citizenship Minor, English 597.03/Geography 597.03 will help students incorporate multiple kinds of knowledge necessary for understanding environmental change and issues, thus building on other courses they have included in their minor program. Combining these varied perspectives into one course helps students develop an understanding of complex human-environment interaction, which is necessary to participate knowledgeably and fully in environmental citizenship.

All the various courses for the minor speak well to the comprehensive nature of the specialty.

Sincerely,

Valerie B. Lee  
Professor and Chair

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**From:** THOMAS HETHERINGTON [mailto:hetherington.1@osu.edu]

**Sent:** Sunday, March 29, 2009 7:53 PM

**To:** Jessica Mercerhill

**Cc:** Peter Curtis

**Subject:** Interdisciplinary Environmental Citizenship Minor proposal

Dr. Jessica Mercerhill  
Director, Special Programs  
Arts and Sciences

The Ohio State University  
4132 Smith Laboratory  
174 W. 18<sup>th</sup> Avenue  
CAMPUS

Dear Dr. Mercerhill,

The EEOB Curriculum Committee has reviewed the proposal for the Interdisciplinary Environmental Citizenship Minor and fully supports the proposal. We would like to recommend, however, that two additional EEOB courses, EEOB 502 (Plants and People, 4 credit hours), and EEOB 505 (Marine Biology and Ecology, 5 credit hours) be included as possible electives for the minor. Both of these classes would be a useful component of a curriculum in environmental citizenship. EEOB 502 (Plants and People) potentially could be listed under both "Science Perspectives" and "Political Science Perspectives."

Sincerely,  
Thomas E. Hetherington, Chair  
EEOB Curriculum Committee  
1110 Museum of Biological Diversity  
1315 Kinnear Road  
CAMPUS

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From: Mangum, Stephen [mailto:mangum\_1@fisher.osu.edu]  
Sent: Friday, March 13, 2009 4:16 PM  
To: Jessica Mercerhill  
Cc: Yutzey, Jay  
Subject: RE: Concurrence Request for Environmental Citizenship Minor Proposal

Jessica:

We have no difficulty with the proposal and give it our concurrence.

I do have a couple of comments. The proposal references FCOB as one of the proposers yet to the best of my knowledge we have had little to no involvement. The proposal does not spell the name of the college correctly (it is Fisher rather than Fischer). No courses listed in proposal are courses offered by Fisher College. The only individual affiliated with Fisher and listed in the proposal is Stephanie Glass. Stephanie is on a one year lecturer contract with us and to the best of my knowledge is not engaged in research activities within the college nor teaching in environmental citizenship.

As mentioned at the outset, the proposed minor has our concurrence. Should you wish to revisit the characterization of Fisher College's role in the development of the minor please feel free to do so. Likewise if there is any reason at this stage in the process to identify a faculty member more permanently engaged in the research and teaching life of the college and potentially able to identify associated courses in the college of relevance to the subject area, we would be delighted to do so.

Thanks.

Steve

Stephen Mangum  
Interim Dean

Fisher College of Business

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**From:** Jill Pfister [mailto:pfister.1@osu.edu]  
**Sent:** Wednesday, March 11, 2009 7:06 AM  
**To:** Jessica Mercerhill  
**Subject:** The Environmental Citizenship Minor and South Asia Minor

The College of Food, Agricultural, and Environmental Sciences Committee on Academic Affairs reviewed the minor proposals for Environmental Citizenship and South Asia and offers it's concurrence but does have some comments which are shown below:

Consider adding three more courses to the Social Sciences Perspective of the Environmental Citizenship Minor:

AED Econ/Int Stds 565    Global Climate Change: Economic Implications and Opportunities  
U G 5  
Rural Soc 766                      Environmental Sociology UG 5

Page 2 of the South Asia minor proposal statement #1 indicates "understanding history, society and culture" What about economics, health, environmental issues? These areas are extremely important to understand this part of the world.

Sincerely,

*Jill A. Pfister*

Jill A. Pfister  
Assistant Dean, Academic Affairs  
College Secretary  
The Ohio State University  
100 Agricultural Administration  
2120 Fyffe Road  
Columbus, OH 43210

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**From:** Jennifer Siegel [mailto:siegel.83@osu.edu]  
**Sent:** Monday, March 23, 2009 7:12 PM  
**To:** Jessica Mercerhill  
**Cc:** Peter Hahn  
**Subject:** Concurrence Request for Environmental Citizenship Minor Proposal from History

The Department of History would like to offer its concurrence for the Interdisciplinary Environmental Citizenship Minor proposal. We think this will be an interesting and challenging addition to undergraduate education at the University.

We would, however, like to propose a friendly amendment to the proposal as currently worded, suggesting that history be included in the forces and disciplines under discussion:

By providing students with an interdisciplinary grounding in environmental studies, the minor will help prepare students to participate knowledgeably in discussions of the physical, biological, social, historical, political and cultural forces that shape environments and to assume an active role in shaping environments by engaging in public debate, personal action, and artistic expression. ?

This field by its very nature is interdisciplinary, encompassing such disciplines as art, earth sciences, environmental and natural resources, geography, history, political science, and sociology.

Yours most truly,

Jennifer Siegel  
Undergraduate Studies Chair

Peter Hahn  
Chair

(614)292-1734  
(614)292-1218 Fax

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March 6, 2009  
Jessica Mercerhill  
Director, Special Programs  
Arts and Sciences  
The Ohio State University  
4132 Smith Laboratory  
174 W. 18th Avenue  
Campus

Dear Jessica,  
Thank you for sending the proposal for an Environmental Citizenship Minor. The Philosophy Department has reviewed the proposal and supports the development of this minor. We would like, though, to urge a minor change—one which I believe will be a surprise (a welcome one, I think) to the members of the committee that developed this proposal.



When I met with the committee, I informed them that, because we had been unable to teach Environmental Ethics (Philosophy 533) for many years and didn't expect to be able to teach it with any regularity, it should not be included as one of the Foundational Arts and Humanities courses. Our expectations have changed, very much for the better. We have just hired a colleague who has a strong interest in and expertise in the area of environmental ethics. We have scheduled this course to be taught next Winter Quarter and expect to be able to teach it with some regularity in the future.

Therefore, I ask that the development committee add Philosophy 533 (Environmental Ethics) to the list of Foundational Arts and Humanities courses.

Sincerely,  
Donald C. Hubin, Professor & Chair  
Department of Philosophy  
email: hubin.1@osu.edu

March 15, 2009

To Whom It May Concern:

The Department of Political Science is very supportive of the Environmental Citizenship Minor. This is an important area, which Ohio State University should be moving into it for curriculum. The proposed minor permits students to learn about the field and learn about how citizens can act to deal with environmental problems. The program looks excellent, covering all the basics in terms of perspectives from natural sciences, social sciences, and arts and humanities, plus giving the students considerable choice by way of electives. We are pleased that OSU will soon be offering this minor.

Sincerely,

A handwritten signature in cursive script, reading "Herbert Weisberg", written in black ink. The signature is fluid and stylized, with a prominent initial "H".

Herbert Weisberg  
Professor and Chair

**APPENDIX D:**

**Syllabi**

**(See CRMT site for individual syllabi)**

Transmittal History for New Interdisciplinary Minor in

**Environmental Citizenship**

**CCI Sciences Subcommittee**

12/11/09

Unanimously approved with contingencies

1. Environmental Citizenship Minor

- Make note of address in Denney 100 on advising sheet
- Rule 1 : 200-level coursework (except for...) can only count for less than half of coursework – note to be made on advising sheet
- Change boilerplate language to Minimum of 25 from 20 (to be corrected on advising sheet)
- Students must all take 597.03 (this subcommittee approved this capstone)
- No lower level course to provide unity for students beginning minor; is there a course that would make sense to have as a required lower-level course? Committee was not sure but this was not considered a contingency.
- Q: Literacy model – how is minor designed using a literacy model?
- Use of “Citizenship” – Competency/ Literacy; we don’t expect them to know Env. Science, but committee has no major issues with title
- Is this a free minor? Is there complete overlap with GEC? Not unusual; not a problem for committee
- Comp 272: Science and Society – committee can see links to environmental issues, but course is not specifically oriented to environment. All other courses in this group have “Environment” in title. Week 10 focuses on environment, How much does course focus on environment – looks like 2 class days.
- Exactly how much, or what % of environment is in course content?
- Committee that put it together accepted this course and has a vested interest in including appropriate courses.
- Possible that course, which looks like a very good course, that it is there as an introductory, foundational course that teaches students an approach to science that is sociological and based on ethics used to apply to later courses.
- Friendly recommendation to consider increasing environmental content (or make more explicit) in this course as a foundational course in this minor. Committee can identify only small amount of environmental topics in it.
- **Add Art 300 and Art 353 to above concern. Recommendation to remove Art 353. Is this a skill relevant to Env Citizenship? Couldn’t any methods of creative production course be part of Env Citizenship?**
- P 3 of proposal please clarify reference to Environ Citizenship major. Is there a major?

- Students allowed only one elective course outside of foundational and required courses. Committee is fine with this.

Motion to approve with contingencies in bold (satisfactory reason for why these two arts courses are in electives or are there other representative courses in Art that might be more appropriate? Why should these courses be included and others not? Are these really best courses to include?)