

Environmental Studies Graduate Certificate Program Proposal

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Rationale:

Given the increasing awareness of environmental crises facing our planet, such as climate change, pollution, and biodiversity loss, interdisciplinary research, teaching, and grant funding to understand and solve these significant environmental problems is growing at a tremendous rate. As a result of this great interest in the environment by both students and scholars, the large majority of our benchmark institutions offer doctoral and master's degrees and/or certificate programs in environmental studies and sciences. Therefore, our proposal for an Environmental Studies Graduate Certificate Program provides an exciting opportunity to create cohesion and transdisciplinarity between faculty and students across UK's campus and to showcase our ability to lead this fast growing field of study about environment-society relationships. In addition, providing a cross-college graduate certificate could provide a way to help connect and build upon the existing and important environment and sustainability-related initiatives currently taking place in the Colleges of Arts & Sciences and Agriculture, Food, and the Environment (as well as other campus wide programs). For these reasons, we propose an Environmental Studies Graduate Certificate that will provide opportunities to build transdisciplinary scholarship and showcase UK's strengths in research, teaching, and graduate training focused on the environment. Our vision, goals, and requirements for this certificate are provided below.

Graduate Certificate in Environmental Studies Requirements:

12 credits + Interest in incorporating an environmental/ecological theme into MA thesis, PhD dissertation, or practicum required by the student's home department.

COURSEWORK:

- **Core Class** (3 credits)

All students enrolled in the certificate program will take one core class that is co-taught by three faculty members (one from the social sciences, one from the natural/physical sciences, one from the humanities). Each faculty member will teach a 5-week module in his or her area, covering one of the three hours of course credit.

- **Electives** (6 credits)

Students will take two electives from a list of suggested courses focusing on the environment from across the university. Students may propose courses not on the list, but at least one of the two courses must be in a department outside the student's home department. Prior to

registration, the graduate director will send an email to all participating departments requesting a list of environment-focused graduate courses (typically 500 level and above) that will be offered during the following semester. This list will be posted to the certificate program's website and distributed to graduate certificate students. Electives must be approved by the graduate program director.

- **Professional Practicum I & II** (3 credits total – 1 fall, 2 spring)

Two professional practicums will focus on planning and participating in the University of Kentucky Political Ecology Working Group's (UK-PEWG) Dimensions of Political Ecology (DOPE) annual interdisciplinary and internationally recognized graduate and undergraduate conference on environment-society relationships. This entirely graduate student-organized conference attracts undergraduate and graduate students, scholars, and practitioners from around the world interested in and working on environment-society relationships from a wide variety of disciplinary backgrounds. Given the conference's international notoriety and success, we feel this event to be the perfect venue to showcase the work of our students and to advertise the program. The course expectations for each semester will be as follows:

Professional Practicum I (Fall Semester, 1 credit hour):

1. Become a member of the Political Ecology Working Group and DOPE conference planning committee.
2. Participate in all Dimensions of Political Ecology (DOPE) Conference planning meetings (optional service on DOPE advisory committee, if elected by the Political Ecology Working Group). Sign-in sheet will be provided at DOPE meetings for attendance at the meetings and sent to the office mailbox of faculty member teaching the course.
3. Plan an "Environmental Studies Graduate Certificate Session" for the DOPE conference. Tasks include: creating a call for proposals/abstracts to be distributed to all Environmental Studies Graduate Certificate students, nominating and inviting a session discussant, and conducting preliminary research for a research paper that each student enrolled in Professional Practicum I will present at the DOPE conference.
4. Produce a document detailing
 - a. Session Call for Proposal
 - b. Abstracts of all papers solicited/accepted to the session
 - c. Log of planning activities completed during (summer and) fall term
 - d. Abstract of the student's own research he/she plans to present at DOPE

Professional Practicum II (Spring Semester, 2 credit hours):

1. Continual engagement with PEWG and DOPE.
 - a. Active participation in the conference administration tasks generally
 - b. Organizing the Environmental Studies Graduate Certificate session(s)

2. Produce:
 - a. 10-20 page manuscript of research presented at the Environmental Studies Graduate Certificate session(s).
 - b. List of contacts made through DOPE that are relevant to student's academic interests (a "network summary")
 - c. Log of all organizing activities during spring term
3. Optional: Prepare manuscript presented at the conference for submission to a peer-reviewed journal.

The two practicums, which must be taken during consecutive semesters, will be overseen by an Environmental Studies-affiliated faculty member (qualifying for 3 faculty teaching credit hours).

Graduate Certificate in Environmental Studies

Possible Electives

(Notes: Some of the courses are cross listed. Not all of these courses are offered regularly. Some of the courses do have prerequisites.)

Anthropology Courses

ANT 525 APPLIED ANTHROPOLOGY

ANT 543 CULTURAL RESOURCE MANAGEMENT

ANT 608 ANTHROPOLOGY OF FOOD AND NUTRITION

ANT 637 SOCIOCULTURAL DIMENSIONS of ECONOMIC DEVELOPMENT

ANT 640/SOC 640 SCIENCE, AGRICULTURE, AND DEVELOPMENT

ANT 641/SOC 641 GENDER ISSUES IN DEVELOPMENT

ANT 684/SOC 684 FARMING SYSTEMS RESEARCH METHODS

ANT 725 SEMINAR IN APPLIED ANTHROPOLOGY

ANT 732 SEMINAR IN ECOLOGICAL ANTHROPOLOGY

ANT 734 SEMINAR IN ECONOMIC ANTHROPOLOGY

ANT 736/ SOC 737 CULTURE, ENVIRONMENT AND DEVELOPMENT.

ANT 774 FOOD AND FOOD SECURITY IN A CHANGING WORLD

Biology Courses

BIO 530 BIOGEOGRAPHY AND CONSERVATION

BIO 561 INSECTS AFFECTING HUMAN & ANIMAL HEALTH

BIO 609 POPULATION AND COMMUNITY ECOLOGY

BIO 667 INVASIVE SPECIES BIOLOGY

Chemistry Courses

CHE 410G INORGANIC CHEMISTRY (understanding common elemental water contaminants like Hg, As, etc. other subjects that require a fundamental knowledge of chemistry)

CHE 514 DESCRIPTIVE INORGANIC CHEMISTRY (mostly transition metal chemistry, but hits other subjects that require a fundamental knowledge of chemistry, beyond CHE 410G)

CHE 565 ENVIRONMENTAL CHEMISTRY

CHE 580 TOPICS IN CHEMISTRY: SUBTITLE (if it is an environmental-relevant course).

Earth & Environmental Sciences Courses

EES 610 TOPICS IN HYDROGEOLOGY AND SURFICIAL PROCESSES (If topic pertains to “contaminant hydrogeology” or another topic of relevance to environmental studies).

Geography Courses

GEO 451G FLUVIAL FORMS AND PROCESSES.

GEO 465 SPECIAL TOPICS IN GEOGRAPHY.

GEO 490G AMERICAN LANDSCAPES.

GEO 530 BIOGEOGRAPHY AND CONSERVATION.

GEO 531 LANDSCAPE ECOLOGY.

GEO 544 HUMAN POPULATION DYNAMICS.

GEO 550 SUSTAINABLE RESOURCE DEVELOPMENT AND ENVIRONMENTAL MANAGEMENT.

GEO 619 REMOTE SENSING FUNDAMENTALS.

GEO 708 GEOGRAPHIC INFORMATION SYSTEMS RESEARCH METHODOLOGIES.

GEO 709 ADVANCED GISCIENCE.

GEO 712 DEVELOPMENT STUDIES AND GEOGRAPHY

GEO 718 TOPICAL SEMINAR IN GEOGRAPHY OF ENVIRONMENT AND RESOURCES

GEO 721 TOPICAL SEMINAR IN PHYSICAL GEOGRAPHY

GEO 731 EARTH SURFACE SYSTEMS.

History Courses

While there are currently no environmental-related history courses on the books, new faculty member Kathryn Newfont would like to develop a graduate-level Environmental History course.

Philosophy Courses

(None of these courses, except for PHI 531.001, is always directly about the environment, but may be, depending on course subtitle or individual project selected)

PHI 531 ADVANCED TOPICS IN ETHICS (Subtitle Required). (3)

PHI 531.001 Advanced Topics in Ethics: Appraisals of Aldo Leopold's Land Ethic
(Fall 2016, Sandmeyer)

*PHI 561 PHILOSOPHICAL PROBLEMS IN THE NATURAL SCIENCES (Subtitle). (3)

PHI 630 SEMINAR IN VALUE THEORY. (3)

PHI 680 SPECIAL TOPICS IN PHILOSOPHY. (3)

PHI 755 TUTORIAL IN INTERDISCIPLINARY ISSUES. (1-6)

PHI 790 RESEARCH IN PHILOSOPHY. (3)

Sociology Courses

SOC 640/ANT 640 SCIENCE, AGRICULTURE, AND DEVELOPMENT

SOC 641/ANT 641 GENDER ISSUES IN DEVELOPMENT

SOC 684/ ANT 684/ FARMING SYSTEMS RESEARCH METHODS

SOC 735 TOPICAL SEMINAR IN SOCIAL INEQUALITIES: INEQUALITIES IN THE ENVIRONMENT

SOC 737/ANT 736 CULTURE, ENVIRONMENT AND DEVELOPMENT

Another graduate course that is currently being developed is CLIMATE CHANGE, ENVIRONMENT, AND SOCIETY (no course number yet)

Departments in the College of Agriculture, Food, and the Environment (CAFÉ) that might also have courses that could qualify:

- Agricultural Economics
- Animal & Food Sciences

- Biosystems & Agricultural Engineering
- Community & Leadership Development
Entomology
- Forestry
- Integrated Plant & Soil Science
- Plant Pathology
- Veterinary Science