

Proposal
Modifications to the
Master of Science in Environmental Education
Program
28 February 2017

Background

The central piece around which the EE program is built is the Fall in the Field Program. The Fall in the Field Program is a set of educational programs developed by each cohort of graduate students and presented to the public, 1st grade through high school depending upon the specific program. This past Fall we served approximately 1250 students through four programs at four sites, two residential and non-residential delivered over an eight-week period.

Each cohort of graduate students begins the planning process in October of their entry year and meets weekly as a group to work through the planning process including choice of theme, choice of educational standards, development of marketing materials, managing a budget, scheduling class visits, scheduling staff deployment, developing a safety plan, working with local growers to supply food for the Food for Thought education component, developing curriculum, developing assessment materials, developing educational resources, seeking small grants to support aspects of the programs, purchasing materials, communicating with our partners including the Bureau of Land Management, Ashland Parks and Recreation, and the Siskiyou Field Institute, and communicating with teachers. I'm certain I have forgotten a few things, but you get the idea. The majority of the group planning process takes place Fall and Winter terms.

This is followed by the Place-based Curriculum class (EE 527) 3 credits during the summer preceding the delivery of the programs where students practice their lessons and work out logistics. Finally, they deliver the programs they have developed as their culminating experience. This also includes assessing the effectiveness of their programs, followed by inventorying and storing program materials and writing the final report. Program delivery is completed under the Leadership in Environmental Education (EE594) and Teaching in Environmental Education (EE 595) course labels.

When we developed the Fall in the Field Program, we did not anticipate the considerable amount of time devoted to the planning process during the entry year including the necessary supervision by program faculty (Stewart Janes and Linda Hilligoss). We attend each of the weekly planning meetings answering questions and stepping in to offer advice when necessary. These meetings typically last 1.5-2 hours. EE faculty are not currently loaded for this work.

Proposal

To account for faculty time during the planning process and to document student efforts on their transcripts, we propose to add 2 credit hours to the Environmental Education Master of Science program raising the program total from 52 credit hours to 54 credit hours. Specifically, we propose to Add 2 credits of EE 592 Leadership in Environmental Education offered as 1 credit seminars fall and winter quarters as each cohort develops all aspects of their Fall in the Field program the ensuing fall quarter as their capstone experience. EE 594 Leadership in Environmental Education will be relabeled EE 594 Leadership in Environmental Education: program Delivery

Current program: In the current program, students complete 4 credits of Leadership at the conclusion of the program when they deliver the educational programs delivered as:

EE 594 Leadership in Environmental Education 4 credits, Fall term (2nd year)

Proposed program changes: We propose two additional credits and relabel the offerings to be delivered as follows:

EE 592 Leadership in Environmental Education: Program Development 1 credit, Fall term (1st year)

EE 592 Leadership in Environmental Education: Program Development 1 credit, Winter term (1st year)

While retaining the current Leadership credits but under a modified name:

EE 594 Leadership in Environmental Education: Program Delivery 4 credits, Fall term (2nd year)

Current catalog copy

EE 594 Leadership in Environmental Education (a total of 4 credits are required)

Students manage an educational program at Deer Creek Center. Participation at Deer Creek Center requires part-time residence at the field station. Pre-requisites: EE 525, EE 527.

EE 595 Teaching in Environmental Education (a total of 4 credits are required)

Students present and assess an educational program at Deer Creek Center involving a variety of audiences. Teaching will be supervised by qualified faculty members from Southern Oregon University. Participation at Deer Creek Center requires part-time residence at the field station. Pre-requisites: EE 525, EE 527.

Proposed catalog copy. Changes in the copy for EE 595 Teaching in Environmental Education simply reflect the addition of more field sites as the program has grown.

EE 592 Leadership in Environmental Education: Program Development (1 credit, a total of 2 credits are required)

Students develop 7-8 weeks of field-based educational programs for a variety of audiences, both residential and non-residential. Includes program design, curriculum development, marketing, budget management, communication with partners and participants, coordinating and scheduling programs, and developing educational resources.

EE 594 Leadership in Environmental Education: Program Delivery (4 credits)

Students manage 7-8 weeks of field-based educational programs, both residential and non-residential. Includes marketing, budget management, communication with participants, coordinating and scheduling programs, and developing resources for future classes. Participation requires part-time on-site residence for the residential programs. Pre-requisites: EE 525, EE 527.

EE 595 Teaching in Environmental Education (4 credits)

Students present and assess develop 7-8 weeks of field-based educational programs for a variety of audiences, both residential and non-residential. Teaching will be supervised by qualified faculty members from Southern Oregon University. Participation requires part-time on-site residence for the residential programs. Pre-requisites: EE 525, EE 527.

ENVIRONMENTAL EDUCATION, MS

The curriculum consists of 54 graduate credits, 39 of which are core credits, distributed as follows:

Required Courses

(39 credits)

- EE 524 - Concepts in Environmental Education 3 credits
- EE 525 - Special Methods in Environmental Education 3 credits
- EE 526 - Trends in Environmental Education 2 credits
- EE 527 - Place-Based Curriculum Development 3 credits
- EE 528 - Environmental Issues 3 credits
- EE 529 - Environmental Education Program Administration 3 credits
- EE 592 – Leadership in Environmental Education: Program Development 1 credit (2 credits total required)
- EE 593 - Practical Applications of Environmental Education 1 to 2 credits (2 credits total required)
- EE 594 - Leadership in Environmental Education: Program Delivery 1 to 4 credits (4 credits total required)
- EE 595 - Teaching in Environmental Education 4 credits
- EE 507 - Selected Topics in Environmental Education 1 credit
- ED 557A - Curriculum, Instruction, and Assessment 3 credits

- ED 557B - Curriculum, Instruction, and Assessment 3 credits
- BI 523 - Natural History of the Pacific Northwest 3 credits

Electives

Complete 15 credits of electives from the following two groups or courses:

A. Complete 2-5 elective courses from the list below:

(6-16 credits)

- BI 513 - Physiological Ecology of Animals 5 credits
- BI 514 - Advanced Animal Physiology 5 credits
- BI 515 - Mammalogy 4 credits
- BI 533 - Plant Systematics 4 credits
- BI 534 - Plant Form and Function 5 credits
- BI 538 - Conservation Biology 3 credits
- BI 544 - Vascular Plant Identification and Field Botany 3 credits
- BI 550 - Fish and Fisheries 4 credits
- BI 554 - Plant Ecology 4 credits
- BI 566 - Biology of Insects 3 credits
- BI 570 - Herpetology 4 credits
- BI 571 - Ornithology 4 credits
- BI 575 - Aquatic Ecology 4 credits
- BI 580 - Animal Behavior 4 credits
- ES 521 - Ecological Economics and Sustainable Development 4 credits
- ES 533 - Soil Science 4 credits
- ES 537 - Conservation in the United States 4 credits
- ES 579 - Biosphere, Ecology, and Global Environmental Change 4 credits
- ES 580 - Fire Ecology 4 credits
- ES 581 - Geomorphology 4 credits
- ES 582 - Climatology 4 credits

B. Select 0-3 courses from outside the sciences (if needed to reach 15 credits)*

Examples of potential courses include the following, although other courses may be used subject to advisor approval:

(0-8 credits)

- COMM 548 - Mediation and Conflict Management 4 credits
- COMM 555 - Conflict Resolution 4 credits
- ES 539 - Land Use Planning 4 credits
- GEOG 551 - Introduction to Geographic Information Systems 5 credits
- PE 548 - Leadership and Management 3 credits
- PSY 538 - Group Dynamics 4 credits
- OAL 570 - Environmental Physiology 3 credits
- SOAN 520 - Environmental Sociology 4 credits
- SOAN 552 - Global Environmental Movements 4 credits

- *Note: 54 credits are required for program completion, including 15 credits of electives. Choose a minimum of two courses and a maximum of five courses from Elective Section A. If more elective credits are needed to achieve 15 credits of electives, choose 0-3 courses from Elective Section B to reach 15 credits of electives.

Program Completion Requirements:

1.

Completion of the required coursework (including four approved electives at the graduate level totaling 15 or more credits). Students must achieve a grade of B or better in all courses. SOU permits up to 15 credits of graduate-level courses (quarter hours or their equivalent) to be transferred into the program with advisor approval.

2.

Successful completion of the exit interviews regarding leadership and teaching in environmental education. The 30-40 minute interviews are conducted with two or more faculty members or instructors following the culminating field educational program delivered by the students (Fall in the Field) using the published scoring guides.

3.

All students must complete an oral examination which is attended by the student's Evaluation Committee which consists of a minimum of three Graduate Faculty, at least two of which are from the Environmental Education faculty or the Biology program. An outside representative from the Graduate Faculty will also attend the Oral Examination. The role of the fourth member is to assure the student is treated fairly and that the standards of SOU are upheld. The oral examination typically takes one-and-a-half hours. It is the responsibility of the student to coordinate a time and place for the examination.

For those students completing the program with a thesis or project, the following applies. Students must apply for completion by thesis or project by the end of the second quarter of coursework at SOU with the Program Coordinator and have secured an advisor at the time of application. Students conducting research in the field of environmental education complete a thesis while those producing a product complete a project. The thesis or project substitutes for one of the science electives.

Program Options:

1.

Teacher licensure. Students may apply for the dual Environmental Education master's degree/Oregon Initial teacher license. Licensure is available at either the middle/high school level (3/4) or the upper elementary/middle school level (2/3). At the 3/4 level students may seek endorsements in either Integrated Science or Biology and must meet the prerequisite coursework before beginning student teaching. Students seeking licensure at the 2/3 level must meet course prerequisites for that program. Refer to the Education department webpage for a list of the course prerequisites for each program. Teacher licensure requires coursework and student teaching in addition to the requirements for the Environmental Education degree though less than if pursuing both the degree and licensure separately.

2.

Certificate in Nonprofit Management (CNPM). For those intending to work with a non-profit organization or initiate their own program, the CNPM provides vital skills and experiences. The CNPM may be earned with only 18 credits in addition to those required by the Environmental Education master's program. Refer to the [Certificate in Nonprofit Management \(CNPM\)](#) section of the catalog for a complete description of the program.

New Course Proposal

Submit completed form electronically

1. **Course prefix and course number:** EE 592
2. **Course title:** Leadership in Environmental Education: Program Development
3. **Abbreviated title for class schedule** (30 characters or less): Leadership in EE: Program Development
4. **Credit hours:** 1
(note: if credits are variable, list range of credits (e.g. 1-8 credits))
5. **Catalog description:**

Students develop 7-8 weeks of field-based educational programs for a variety of audiences, both residential and non-residential. Includes program design, curriculum development, marketing, budget management, communication with partners and participants, coordinating and scheduling programs, and developing educational resources.

6. **Prerequisites (to add each additional prerequisite, start a new line):**
(See attached Note for samples)

A. (course prefix, (space) and number)	or	or	or	or
B. (course prefix, (space) and number)	or	or	or	or
C. (course prefix, (space) and number)	or	or	or	or

7. **Co-requisites (including labs, if any):**

A. (course prefix, (space) and number)	or	or	or	or
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8. **Major/Class restrictions: Please indicate any class or major restrictions:** Must be a student in the Environmental Education master's program
9. **Is course repeatable?** Yes ☒ No ☐ If Yes, list maximum credits: 2
10. **Labs requirements:** If course includes a lab: # of hours lecture: 0 ; # of hours lab: 0
11. **Fees:** List any course fees: \$0
12. **Grade Mode:** Graded only: ☒ Pass/No Pass only: ☐ Option: ☐
13. **CIP Code:** Six-digit CIP code (check with your Division Director):

14. Special qualifications; Is course proposed for (yes/no):

A. University Studies? no If yes, list Strand(s)

B. Honors? no

15. Cross-listing: List any cross-listing: and and and and

16. Strategic justification for proposed course:

Rationale: What is the overall strategic rationale for offering this course?

A. When we developed the Fall in the Field Program, the culminating experience for students in the Environmental Education master's program, we did not anticipate the considerable amount of time devoted to the planning process during the entry year including the necessary supervision by program faculty. We attend each of the weekly planning meetings answering questions and stepping in to offer advice when necessary. These meetings typically last 1.5-2 hours. EE faculty are not currently loaded for this work nor do students receive credit for their learning.

B. Alignment:

1. How does this course align with the unit's mission plan? Preparation for the culminating experience fits precisely with the unit's mission of creating leaders and practitioners in the field of Environmental Education.

2. How does the course fit into the rest of the unit's curriculum? Again, the fit is precise and simply reflects what is already taking place.

C. **Enrollment:** What is the new course's estimated enrollment each time it is offered over a three-year period? Year 1 15 students; Year 2 15 students; Year 3 15 students

D. **Resource evaluation:** What resources – faculty, equipment, lab space, etc. -- will be needed to offer this course and how will those resources be obtained?

1. *Faculty:*

- a. Who will teach the course? Environmental Education faculty: Dr. Stewart Janes and Linda Hilligoss
- b. Evaluate unit's faculty availability and/or needs and the impact on other teaching obligations. The course allows us to put a current obligation that is not loaded into the regular teaching load. The increased obligation has been approved by Dr. Ettlich, STEM Director and Dr. Karen Stone , Assoc. VP for Academic Resource Management.
- c. If additional faculty members are needed, how will that need be met?

2. *Facilities:* Cite any additional need for classrooms, equipment or lab space; explain how that need(s) will be met. 1 classroom 2 hours /week fall and winter terms (space already being used for this purpose).

3. *Other:*

- a. Are Hannon Library resources sufficient to meet the needs of this course?
yes
- b. Are any other resources needed to support this course? no
If so, please explain how they will be obtained.

E. External impact:

1. What is the expected effect of this course on existing programs elsewhere in the university?

Required meeting with the Education Department, Biology Department, STEM Division Director, Assoc. VP for Academic Resource Management to assure added loading would not cause undue hardship on those programs.

NOTE: Please document your contact with other academic programs which may be affected by this new course and the response you received.

2. Will any of your prerequisites affect other academic programs? no

NOTE: Please document your contact with other academic programs which may be affected by this new course and the response you received.

17. Syllabus (condensed)

*(Attach an accompanying, condensed syllabus, which should include the following items. Schedules and similar details are **not** required.)*

A. Course description (same as Catalog description, above)

Students develop 7-8 weeks of field-based educational programs for a variety of audiences, both residential and non-residential. Includes program design, curriculum development, marketing, budget management, communication with partners and participants, coordinating and scheduling programs, and developing educational resources.

B. Learning objectives of the course

The learners will develop all aspects (see description) of 7-8 weeks of field-based educational programs for a variety of audiences, both residential and non-residential.

C. Required texts

none

D. Course format

Student lead meetings (seminar)

E. Other – any other relevant materials needed to explain the goals and teaching methods of this course.

Approvals:

Signature of Division Director

Date

4/29/16

OK'd Senate 2/3/17
OK'd by GC 2/28

Environmental Science & Policy Curriculum Changes

2017-2018

Course Addition:

ES 100: The Southern Oregon Bioregion

ES 100 will serve as an introduction to the major and the field of environmental science & policy. The 2 credit field course will further be used to introduce students to the key stakeholders in the area that will be important in the development of future research, internship, and practicum. The course will, by necessity, follow an irregular schedule that may include full-day and/or weekend scheduling. This course is being added to the curriculum as a result of assessment data that suggests the need for our program to introduce students to regional problems earlier in their degree, develop a cohort in the first year of courses, and become more familiar with specific program requirements.

Associated Changes:

1. The total number of credits required in the major will increase from 77-80 to 79-82.
2. The total number of lower division credits will increase from 24-26

Course Deletions:

ES 327L: Energy and climate change was developed and proposed several years ago. As a result of repetitive teaching, we have concluded that a lab is not necessary for the specific content presented in this course. We are requesting that the co-requisite on ES 327 be removed and the ES 327L be deleted. ES 327 will continue to be taught as a 4 credit course taught in 2 2-hour blocks per week.

ES 383: This course was proposed and taught by a member of the faculty no longer teaching with us. The course does not fit within our mission or our objectives NOR does it fit within the framework of our new major title.

ES 457, ES 457L, ES 557, ES 557L: When Introduction to Global Positioning Systems was first developed, GPS technology required technical training for use. As a result of a changing field, GPS technology is now user-friendly and does not require technical training. The application of GPS data is presently taught in ES 349, ES 451, and ES 453. These courses are no longer needed within our curriculum.

