

## Environmental Education and Communication Graduate Certificate

Environmental Education and Communication research and practice spans a number of disciplines represented by several units at the University of Florida. Students wishing to work in formal education are likely to be enrolled in the College of Education as part of a teacher certification program. Those who plan to work in nonformal environmental education, developing community-based youth programs or conducting adult information and outreach programs for agencies and organizations, may be enrolled in Wildlife, Fisheries and Aquatic Sciences; Family Youth and Community Sciences nonprofit track; Forest Resources and Conservation; Religion and Nature program; Political Science; or Soil and Water Sciences, for example. All environmental educators and communicators need a background in environmental science content, especially ecological processes and natural resource management, as well as skills in effective program design and delivery.

The EEC certificate will be awarded to graduate students enrolled in any University of Florida Master's or Doctorate level program who have completed at least 15 credit hours of approved courses. The Graduate Certificate is administered by the School of Forest Resources and Conservation and Co-directed by Dr. Martha Monroe, School of Forest Resources and Conservation and Dr. Susan Jacobson, Department of Wildlife Ecology and Conservation.

Students must apply for admission to the Certificate before 50% of the coursework is complete. To apply:

- Visit <http://www.admissions.ufl.edu/start.html> and complete the Certificate application
- Watch for confirmation from [sfrc-online@ifas.ufl.edu](mailto:sfrc-online@ifas.ufl.edu) that you are enrolled in the program
- Complete the coursework as outlined below and then [submit this form to Dr. Monroe](#)
- Apply to complete the certificate in ISIS at the beginning of your last semester of certificate coursework
- Complete the summative essay by mid-semester of the last semester of certificate coursework

Students must complete 15 credits (five courses) in the following distribution. Take 6 credits from Group 1 and 3 credits from each of Group 2, 3 and 4. Students must earn a minimum grade of "B" in all courses used toward this certificate. A maximum of one substitute course may be considered upon petition.

### Group 1: Environmental Education and Communication Theory and Practice (Complete 6 credits)

- AEC6540 Agricultural and Natural Resources Communications Theory and Strategies - 3 credits, letter-graded
- FNR5072C Environmental Education Program Development - 3 credits, letter-graded
- FOR6005 Conservation Behavior - 3 credits, letter-graded
- LAS6291 Conservation and Development Skills - 3 credits, letter-graded
- SCE6045 Environmental Education Materials and Methods - 3 credits, letter-graded
- SCE6246 Science Instruction in Informal Settings - 3 credits, letter-graded
- SCE6647 Global Studies Methods in Science Education - 3 credits, letter-graded
- WIS6525 Environmental Interpretation - 3 credits, letter-graded

### Group 2: Ecological Science (Complete 3 credits)

- BOT5695C Ecosystems of Florida - 3 credits, letter-graded
- EES5315 Ecology and the Environment - 3 credits, letter-graded
- EES6308C Wetland Ecology - 3 credits, letter-graded
- FAS6272 Marine Ecological Processes - 3 credits, letter-graded
- PCB5356 Tropical Ecology - 3 credits, letter-graded

- SWS5235 South Florida Ecosystems - 3 credits, letter-graded
- WIS555C Conservation Biology - 3 credits, letter-graded
- WIS6468 Pattern and Process in Landscape Ecology - 3 credits, letter-graded
- WIS6934 Climate Change Ecology – 2-credits, letter-graded (Special Topics in WEC, permanent course number TBA)

### **Group 3: Social Dimensions of Human-Environment Interactions (Complete 3 credits)**

- AEB7453 Natural Resource and Environmental Economics - 3 credits, letter-graded
- AEC5541 Communication and Instructional Technologies in Agricultural and Life Sciences - 3 credits, letter-graded
- AEC6552 Evaluating Programs in Extension Education - 3 credits, letter-graded
- ARC6391 Architecture, Energy, and Ecology - 3 credits, letter-graded
- CPO6795 Environmental Politics - 3 credits, letter-graded
- EES6009 Ecological Economics - 3 credits, letter-graded
- ENV5075 Environmental Policy - 3 credits, letter-graded
- FNR6669 Natural Resource Policy and Economics - 3 credits, letter-graded
- FYC6620 Program Planning and Evaluation for Human Service Delivery – 3 credits, letter-graded
- GEO6938 Protected Areas Management – 3-credits, letter-graded (special topics in Geography, permanent course number TBA)
- GLY6075 Global Climate Change: Past, Present, and Future - 3 credits, letter-graded
- MMC6660 Mass Communication and Society - 3 credits, letter-graded
- REL6183 Religion and Environmental Ethics - 3 credits, letter-graded
- WIS6578 Human Dimensions of Biological Conservation - 3 credits, letter-graded

### **Group 4: Sustainable Resource Management (Complete 3 credits)**

- EVR6320 Sustainable Natural Resource Management - 3 credits, letter-graded
- FAS6355C Fisheries Management - 3 credits, letter-graded
- FOR5157 Ecology Restoration Principles and Practices - 3 credits, letter-graded
- FOR6665 Landscape Planning for Ecotourism - 3 credits, letter-graded
- FOR6628 Community Forest Management - 3 credits, letter-graded
- FOR6934 Natural Resources in a Changing Climate (Special Topics in FRC, permanent course number TBA) – 3-credits, letter-graded
- FYC6302 Sustainable Community Development - 3 credits, letter-graded
- LAS6290 Tropical Conservation and Development - 3 credits, letter-graded
- LEI6325 Ecotourism - 3 credits, letter-graded
- WIS6543 Wildlife and Agriculture - 3 credits, letter-graded

### **SUMMATIVE ESSAY**

In addition to completing a total of 5 courses representing the required categories on the approved course list, the EE&C Certificate requires a summative assessment of your mastery of environmental education and communication knowledge and skills. A written essay should be submitted to Dr. Martha Monroe (mcmonroe@ufl.edu) by mid-semester of the semester you intend to apply to complete the EEC Certificate.

The essay should be approximately 750 words and should describe how you would use the EE&C strategies you learned in your coursework to achieve a particular education or communication goal of your choosing. You may use an actual or hypothetical situation to respond to the items below. Include the following components in your essay:

- A. A description of an environmental, problem, issue, or situation that requires a targeted education or communication program. Please explain why EE&C is an appropriate strategy for addressing this problem, issue, or situation. Describe two theories that you would use to help guide your education or communication effort as you developed your program or activity.
- B. A description of the target audience for your education or communication effort. Please include the age range targeted and other relevant demographic characteristics of your target audience as well as a description of the specific context in which your education or communication program would be delivered (classroom, visitors to a particular informal setting, residents, training, etc.)
- C. A description of how your education or communication program would be delivered (e.g., a face-to-face audiovisual presentation, a regional mass media campaign, a district-wide school based program, an interactive website, a podcast or webinar).
- D. A description of three desired learning outcomes for your target audience (objectives) that clearly identify specific knowledge, attitudes, skills, and/or behavioral outcomes of your program.
- E. A description of two evaluation methods you would use to assess the success of your program.