Environmental Education Outcomes

Online Course Cornell University Civic Ecology Lab February 12 – April 1, 2019

Course is largely asynchronous, but includes weekly webinars.

Registration Link:



Description. Is the goal of environmental education to instill pro-environmental behaviors, foster collective environmental action, and/or developing healthy and productive citizens? Through short pre-recorded lectures, podcasts, readings, social media, and live webinars, this course will help you define your environmental education goals and learn what the research says is the best pathway to achieve them. Topics include environmental behaviors, collective action, knowledge, values, attitudes, nature connectedness, sense of place, identity, self- and political-efficacy, norms, social capital, health and wellbeing, positive youth development, academic achievement, and resilience. Students diagram their own theory of change outlining how to reach their environmental education goals. Through this course, you will apply research-based knowledge to start new or enhance existing environmental education programs, strengthen your professional networks by exchanging ideas and resources with peer educators and university students around the world, and gain professional credentials.

Participants. Environmental educators, including teachers, nonformal educators, environmental and park managers, zoo and garden educators, volunteers, and university students. Available to students in any country. Lectures are in English with subtitles in English, Chinese, and Spanish.

Cost. \$50 fee. Options available to pay a higher fee to sponsor another student or pay a lower or no fee if you are unable to pay or live in a country without credit card or Alipay system.

Certificates. Participants who complete the course are awarded a Cornell University certificate (PDF). Weekly assignments include watching lectures, readings, and discussion questions. Students are required to participate in a minimum of one course webinar. Required course project is a diagram and short narrative of your theory of change for your current or future environmental education program.

Educational approach. The course is based in three principles: (1) Learning is social: we learn effectively within a social context, thus networking and exchange of ideas among participants is crucial; (2) Learning can lead to innovation: course participants build on the course materials to develop new ideas for environmental education; and (3) Learning can foster practice change: we will apply course content and ideas to real environmental education programs. The course uses the *Edge edX* learning management system and optional closed groups on Facebook, WeChat, Telegram, and other social media to facilitate idea and resource exchange. Weekly webinars, conducted on Wednesdays at 8am and Thursdays at 10am, use Zoom conferencing software.

Learning outcomes. By the end of this course, students will be able to:

- 1. Define environmental education goals and your own program goal(s).
- 2. Describe and critically reflect on research about what works and doesn't work in achieving different environmental education outcomes.
- 3. Discuss models for environmental education with peers.
- 4. Diagram and explain a theory of change appropriate for your educational program.

Course Instructors. Marianne Krasny, Alex Kudryavtsev, Anne Armstrong, Yue Li, Kim Snyder, Cornell University Civic Ecology Lab

Duration. 5 weeks (4-5 hours of work per week), plus 2 weeks to complete course project.

Dates: February 12 – April 1, 2019. All weekly and final assignments must be completed no later than 1 April 2019.

Environmental Education Outcomes: Weekly Topics

Each week we cover 3-4 topics or course "units," focusing on environmental behavior and collective action as well as the "intermediate" outcomes that lead to behavior and action. Each unit includes a prerecorded short lecture, readings, short-answer assignments, and webinars. Each week students answer one discussion question.

Week 1: Introduction (12-18 February)

We introduce the course, theory of change, and assessment. Students introduce themselves and their work or studies to each other.

• Topics: Course introduction, Theory of Change, Assessment

Week 2: Behaviors, actions, intermediate outcomes 1 (19-25 February)

We introduce types of environmental behaviors and collective action, along with the intermediate environmental education outcomes knowledge and values.

Topics: Environmental behaviors, Collective environmental actions, Knowledge, Values

Week 3: Intermediate outcomes 2 (26 February – 4 March)

Intermediate outcomes, including attitudes, nature connectedness, sense of place, and identity, can predict environmental behaviors and collective action.

• Topics: Attitudes, Nature connectedness, Sense of place, Identity

Week 4: Intermediate outcomes 3 (5 March - 11 March)

Self-efficacy and norms are important predictors of environmental behaviors, whereas political efficacy and social capital are linked to collective action.

• Topics: Self-efficacy, Political efficacy, Norms, Social capital

Week 5: Other environmental education outcomes (12 March – 18 March)

Environmental education fosters health and wellbeing, youth development, and academic achievement. Resilience may be an ultimate outcome of environmental education, and is particularly relevant in an age of disruptions related to climate change.

- Topics: Health and wellbeing, Positive youth development, Academic achievement, Resilience
- Week 6. Synthesis and constructing your theory of change (19 March 26 March)

We review environmental education program design principles and revisit theory of change in preparation for students developing their final project—a theory of change diagram and narrative for your program.

Topics: Program design principles, Theory of change

Requirements to Earn Certificate

To earn the Cornell Certificate, by 1 April 2019, students must:

- 1. Complete one *discussion question* post for each of five weeks (five total).
- 2. Comment on minimum of one other student's discussion question post (five total).
- 3. Participate in a minimum of one *webinar* and complete reflection question for that webinar.
 - 4. Complete your Theory of Change final project.