

**Environmental Education:
Learning inside and outside the classroom
11:374:416**

Meeting time: To be determined

Location: To be determined

Instructor: Mary L. Nucci, Ph.D.

Office: Cook Office Building (Cook), Room 214

Office Hours: By arrangement

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Course Description

Environmental education is key to promoting an understanding of environmental issues in order for citizens to “have the skills to make informed and responsible decisions” (EPA, 2023)¹. Creating skilled teachers is key to achieving this goal. Students in this course will discuss the history of and issues in both formal (classroom) and informal environmental education. Based on these discussions, they will develop lesson plans for inside and outside the classroom which following best practices in teaching and the appropriate state standards in order to promote the goal of environmental education to create an informed and responsible citizenry.

Course Learning Goals

- Describe the major goals of environmental education.
- Articulate issues in teaching about the environmental.
- Design appropriate curriculum for environmental literacy lessons inside and outside the classroom.
- Demonstrate a basic knowledge of assessment methods to evaluate learning.
- Practice skills on how to teach about the environmental in formal and informal environments.

Course materials

All course materials will be provided on Canvas or handed out in class.

Class protocol

Class begins promptly. Be on time. If you have a conflict or an unavoidable reason to be late, please let me know in advance by phoning, texting or sending an email.

Due dates

Assignments will be eligible for full credit points when handed in on time. Late assignments will lose 1 point for each day late before grading.

¹ <https://www.epa.gov/education/what-environmental-education>

Assignments and grading

Unless you are directed otherwise, all writing assignments should be single spaced, in 12-point font, and include your name and page numbers, and should use American Psychological Association formatting (<http://libguides.rutgers.edu/writing>).

Due Date	Assignment	Points
wk 2	Class lesson topic	5
wk 3	Annotated bibliography	5
wk 4	Class lesson draft 1	10
wk 5	Class lesson draft 2	10
wk 6	Peer assessment	10
wk 7	Class lesson final	20
wk 8	Informal lesson topic	5
wk 10	Annotated bibliography	5
wk 11	Informal lesson draft 1	10
wk 12	Informal lesson draft 2	10
wk 13	Peer assessment	10
wk 14	Informal lesson final	20
wk 14	Portfolio presentation	5
	Attendance/participation	39
	Total	164

As this is a 400-level class, you will be expected to participate fully in all class discussions. Course work will include in class readings and breakouts where you will be asked to digest and respond critically to a variety of readings, including public articles, scientific papers and research reports. Class participation points (3 points/class) will be assigned as 3 points: complete participation, 2 points: partial participation, 1 point: minimal participation, 0 points: no participation. Participation is defined as engaging with discussions and activities, posing questions, providing input, and responding to other students. Final grade will be determined as a percentage of the total points from assignments and participation using the standard Rutgers grading scale: A = 89.5-100; B+ = 84.5-89.49; B = 79.5-84.49; C+ = 74.5-79.49; C = 69.5-74.49; D = 59.5-69.49; F = <59.4.

Course schedule (topics and dates subject to change)

	Topic	Readings
Week 1	Introductions. Syllabus Review. Class structure. Nature connections.	Carter, R. L., & Simmons, B. (2010). The history and philosophy of environmental education. The inclusion of environmental education in science teacher education, 3-16.
Week 2	Issues in environmental education. How people learn.	Chapter 3. Learning and Transfer. In Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn (Vol. 11). Washington, DC: National Academy Press.
Week 3	How teachers teach: Lesson planning, benchmarks and standards.	Milkova, S. Strategies for effective lesson planning. Found at https://venktesh22.github.io/Strategies_for_Effective_Lesson_Planning.pdf
Week 4	How teachers teach: outcomes, assessment.	Various chapters in: (1) Mohan, R. (2023). Measurement, evaluation and assessment in education. PHI Learning Pvt. Ltd. (2) Driscoll, A., & Wood, S. (2023). Developing outcomes-based assessment for learner-centered education: A faculty introduction. Taylor & Francis. (3) Stevens, D. D., & Levi, A. J. (2023). Introduction to rubrics: An assessment tool to save grading time, convey effective feedback, and promote student learning. Routledge.
Week 5	Broadening the lesson.	Chapter 4 in Tawil, S., & Locatelli, R. (2015). Rethinking education: Towards a global common good. Dostupné z https://www.norrag.org/rethinkingeducation-towardsa-global-common-good .
Week 6	In class peer assessment	Conklin, J. (2005). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives complete edition.
Week 7	An introduction to informal education.	Ch 2 Theoretical Perspectives IN Feder, M. A., Shouse, A. W., Lewenstein, B., & Bell, P. (Eds.). (2009). Learning science in informal environments: People, places, and pursuits. National Academies Press.
Week 8	Designing experiences. Field trip to Math and Science Learning Center, Busch	Pecore, J. L., Kirchgessner, M. L., Demetrikopoulos, M. K., Carruth, L. L., & Frantz, K. J. (2017). Formal lessons improve informal educational experiences: The influence of prior knowledge on student engagement. Visitor Studies, 20(1), 89-104. AND Gross, Z., & Rutland, S. D. (2017). Experiential learning in informal educational settings. International Review of Education, 63, 1-8.
Week 9	Active learning and the informal space.	Bruce, C., & Bryant, E. (2008). Accessible design practices and informal learning environments. In Aging, disability and independence: Selected papers from the 4th International Conference on Aging, Disability and Independence (Vol. 22, pp. 41-56).
Week 10	How people learn (Part II)	Chapter 5 Science learning in designed settings IN Feder, M. A., Shouse, A. W., Lewenstein, B., & Bell, P. (Eds.). (2009). Learning science in informal environments: People, places, and pursuits. National Academies Press.
Week 11	Rethinking the lesson plan: wilding pedagogies.	Ford, D. (2016, September). Stepping off the well-trodden path: Is a wilder pedagogy possible. In FORUM (Vol. 58, No. 3, pp. 391-398). Symposium Journals.
Week 12	Rethinking teaching: where are we going and how should we get there?	Holfelder, A. K. (2019). Towards a sustainable future with education?. Sustainability science, 14(4), 943-952. AND The Future of Education and Skills: Education 2030. Found at https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf
Week 13	In class peer assessment.	
Week 14	Presentations	

Absence policy

Rutgers students are expected to attend all scheduled course meetings. University policy excuses absences due to religious observance or participation in Rutgers-approved activities and permits students to make up work missed for these circumstances. If you will be absent from a class, lab, or exam for any reason, you need to report your absence through the Absence Reporting Website <https://sims.rutgers.edu/ssra/>. The system will generate an email to me about your absence, but the University recommends that you also contact me directly to let me know of your absence. I will take attendance at every class.

Key points to know:

- If you enter the class after I take attendance, please make sure at the end of the class I mark you as present.
- Note that if you miss class, you will not receive the participation points for that class.
- More than 2 unexcused absences other than per Rutgers guidelines (an excused absence is illness with a doctor's note, family emergency, religious observation or Rutgers-sanctioned event with note) MAY result in a letter grade drop for your final grade.
- Only students with excused absences will be offered the opportunity to meet with me to review the class content.

Student Wellness Services

School and life can get stressful, and Rutgers has many ways to get help. We can offer a Safer Space and help you connect to these resources, but as instructors we have a mandatory duty to report some issues and concerns to the appropriate offices at the University. We can offer you privacy and discretion, but not confidentiality.

There are resources for students with long-term problems through the Office of Student Support (<https://studentsupport.rutgers.edu/>). This office, part of the Dean of Students office, services students who have ongoing personal or medical issues and anticipate extended absences or missing multiple assignments. Please contact this office if you have issues that make you miss many classes and/or assignments.

The faculty and staff at Rutgers are committed to your success. Students who are successful tend to seek out resources that enable them to excel academically, maintain their health and wellness, prepare for future careers, navigate college life and finances, and connect with the RU community. Resources that can help you succeed and connect with the Rutgers community can be found at success.rutgers.edu.

Academic Integrity

Plagiarism and other types of dishonesty is a major offense at Rutgers University. This includes copying of images and texts without giving full credit, paraphrasing inappropriately, cheating, using AI-derived tools to write text for you, and many other

actions. We will be using Turnitin for checking submitted texts, and we will report any instances of academic misconduct to the Office of Student Conduct.

You are responsible for understanding the academic integrity policy and following its principles. Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld. The complete academic integrity policy can be found here: <https://academicintegrity.rutgers.edu/>.

Disability Services

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>

Diversity and Inclusion

It is our intention that students of all backgrounds and abilities will be well served by this course. We will work to create an environment of inclusion that respects and affirms the inherent dignity, value, and uniqueness of all individuals, communities and perspectives. We are lucky to have a diverse university. Diverse voices and life experiences enhance the learning process and we welcome students to share their personal experiences. We will not tolerate disrespectful language or behavior against any individual or group. If you feel as though you have been disrespected or treated unfairly by the instructors or any other individual please let us know. You may speak with the instructors in person, over email or report anonymously using the feedback note box. You may also report bias to Rutgers Diversity and Inclusion initiative using this link: <http://inclusion.rutgers.edu/report-bias-incident/>

Land Acknowledgement

We acknowledge that we will be conducting class on the traditional homelands of the Lenape people. "To recognize the land is an expression of gratitude and appreciation to those whose territory you reside on, and a way of honoring the Indigenous people who have been living and working on the land from time immemorial. It is important to understand the long-standing history that has brought you to reside on the land, and to seek to understand your place within that history. Land acknowledgements do not exist in

a past tense, or historical context: colonialism is a current ongoing process, and we need to build our mindfulness of our present participation. It is also worth noting that acknowledging the land is Indigenous protocol.”

(From <http://www.lspirg.org/knowtheland/>)