

Outdoor Environmental Education in Theory, Policy & Practice (BIOL/EDUC/ENVI 275)

Macalester College -- Fall Semester 2024

Times: Seminar: Mondays & Wednesdays, 1:10 to 2:10 PM

Lab: Fridays 1:10-4:30 PM

Rooms: Olin-Rice 243 (MW) and Olin-Rice 243 (F)

Instructor: *Jerald Dosch* (dosch@macalester.edu; 651-696-6187; Olin-Rice 210; student drop-in hours are MWF 9:30-11:30 and by appointment)

Teaching Assistant: Emily Bruce (ebruce@macalester.edu); office hours T mornings 10:00-11:00 in the Smail Gallery and also by appointment.

Course Description

This course provides an introduction to outdoor education as an opportunity to promote environmental literacy, social justice and environmental sustainability in a globalized world. Informed by relevant philosophical, psychological, cultural and political-economic frameworks, in addition to critical issues in public education policy and practice, we will explore interdisciplinary approaches to outdoor environmental education appropriate for students across the K-12 continuum. We will reference the Katharine Ordway Natural History Study Area (Ordway Field Station) as an outdoor classroom and will adapt curriculum from Project WILD, the Minnesota Department of Natural Resources (DNR), Jeffers Foundation, Pollinate Minnesota and other outdoor education organizations to assist elementary school teachers and students in fulfilling Minnesota K-12 academic standards.

Weekly lab sessions will include exploration of outdoor curricular materials with local outdoor educators, small group preparation of outdoor learning curricula and kits for field days during which course members design and implement educational opportunities for local elementary school students, and other experiential learning opportunities. Weekly seminar sessions incorporating readings, reflective writing, and individual and small group projects to complement the experiential aspects of the course. As the semester progresses, each course member will develop a curricular unit aimed at teaching an important environmental issue to diverse adolescents attending urban public schools. The curricular unit is a significant undertaking that provides students the opportunity to synthesize all aspects of the course in a creative, pragmatic and integrative capstone manner.

Course Readings [these 4 books are also on reserve in the library]

- Gilbertson, Ewert, Siklander and Bates. 2023. *Outdoor Education: Methods & Strategies* (2nd ed). ["how to" for outdoor education]
- Nolet. 2015. *Educating for Sustainability: Principles and Practices for Teachers*. [key pedagogy resource for curricular units]
- Roberts. 2011. *Beyond Learning by Doing: Theoretical Currents in Experiential Learning*. [philosophical insights]
- Wood. 2018. *Yardsticks: Child and Adolescent Development, Ages 4-14* (4th ed). [primer on child development]

Additional curricular and pedagogical books and resources from the Project WILD, the Minnesota DNR and the Jeffers Foundation will be provided to you free of charge.

Other readings from scholarly journals and the popular press may be assigned and linked or posted on Moodle.

Course Moodle Page

<https://moodle.macalester.edu/course/view.php?id=3958#section-0>

Please note that the course Moodle page will be updated on a regular basis during the semester.

Course Assignments

Ordway Retreat: We will launch our explorations of outdoor environmental education at a required course retreat [**Saturday September 14**] at the Katharine Ordway Natural History Study Area (Ordway Field Station). This retreat will provide an in-depth, experiential orientation to Ordway as an outdoor classroom, an introduction to pedagogies from [Pollinate Minnesota](#), and introductions to [Project WILD](#) teaching methods and curricular materials developed by the MN Department of Natural Resources (DNR) and the Association of Fish and Wildlife Agencies as well as resources from the [Jeffers Foundation](#).

Reflective Journal: Critical and creative reflection is required to effectively integrate theory, research, and policy with principled practice. To this end, you are asked to complete a series of *concise reflective contributions, all aimed at expanding and deepening your skills as an aspiring outdoor educator*. Forums are listed either as Readings Forum or Action Forum, each with specific instructions provided on Moodle. These time sensitive contributions should be posted as specified on Moodle. Reflective Journals, as compilations of Forum responses, will be collected before midterm and nearing completion of the semester. By carefully and thoughtfully completing these assignments you will also be building an individualized resource that will serve you well in your future as an educator.

Book Review: You are asked to choose a book directly related to outdoor environmental education that you have not previously read. It may be related to theory, practice, curriculum, policy, or other angles approved by the instructors. After reading the book you are to write a review (500 words) targeted to an audience of your fellow students and course instructors. This assignment should be posted in the Book Review Forum on Moodle. This assignment will not only benefit you but will also contribute to a collective library of 15 different books chosen by yourself and your classmates. These will form the basis of a manageable future reading list beneficial to you as an educator.

Outdoor Education Learning Curricula and Kits: In small groups, you will plan and lead three (3) outdoor learning experiences for elementary school students and their teachers. All outdoor activities will be designed for implementation in outdoor greenspaces at Macalester's Ordway Field Station with participating elementary schools. Curricula and kits will provide all materials necessary to support developmentally appropriate outdoor experiences designed to fulfill Minnesota K-12 academic standards. Ideally, the kits and curricula will also be designed such that teachers from the partner schools will be able to replicate the experiences in some fashion using their local school environments.

Sustainability Education Curricular Units: Later in the semester, we will work to challenge and support each other's efforts to develop the design of a *sustainability education unit* [intensive mini-course, 12 hours of instructional time] aimed at teaching a significant and challenging

social/environmental issue, to adolescents (grades 7-12), incorporating a sustainability perspective and a significant beyond-the-classroom (e.g. outdoor or community-based) activity. Your unit will include: 2 class sessions for presentation and preparation; one full day (6 hours) experiential/meaning-making retreat; 2 class sessions for reflection/assessment; followed by a 2-hour sharing event. Your unit will begin with an informative and compelling PowerPoint presentation summarizing background knowledge necessary for effective teaching of your selected issue.

Grading

This course is structured with the goal of supporting all students in having deep and meaningful learning experiences and to demonstrate a high quality of performance during these challenging times. Because effective learning requires active participation and cooperative exchange, attendance and full participation in all seminar and lab sessions is required. Grades are assigned upon completion of *all course components* and based upon the following guidelines. Rubrics that will be available on Moodle.

Reflective Journal	40%
Book Review	10%
Outdoor Learning Kits	30%
Sustainability Education Curricular Unit	20%

Statement on Well-being and Link to Mental Health Resources

Here at Macalester, you are encouraged to make your well-being a priority throughout this semester and your career here. Investing time into taking care of yourself will help you engage more fully in your academic experience. It is important to acknowledge any stressors you may be facing, which can be mental, emotional, physical, financial, etc., and how they can have an academic impact. In the classroom, please do what is necessary to support your personal well-being so long as it does not impede your or others' ability to be mentally and emotionally present in the course. If you are having difficulties maintaining your well-being, please don't hesitate to contact us and/or find support from other resources including those offered by the [Laurie Hamre Center for Health & Wellness](#).

Statement on Accommodations/Disabilities Services

I am committed to ensuring access to course content for all students, including those with disabilities. If you have a disability, please meet with me early in the semester to discuss your accommodation plan. If you have not yet obtained a plan or are unsure if you have a disability that requires accommodation, please contact Disability Resources: disabilityresources@macalester.edu, or call 651-696-6275.

Statement on Academic Integrity

All students will be required to abide by the Macalester College academic integrity guidelines including updates regarding artificial intelligence (AI) found at <http://www.macalester.edu/academicprograms/academicpolicies/academicintegrity/>.

Artificial intelligence (AI) use policy

In this course, you may use AI tools (such as Bard or ChatGPT) to help you generate ideas and to brainstorm. However, you should note that the material generated by these tools may be inaccurate, incomplete, or otherwise problematic. Beware that overuse of AI may stifle your own independent thinking and creativity, and use any tools (for generating text, code, video, audio, images, or translation) wisely and carefully.

You may not submit any work generated by an AI program as your own. If you include material—including both *ideas* and *language*—generated by an AI program, it should be cited like any other reference material, both in this course and at Macalester College in general. If you have any questions, please feel free to contact me.

Religious Observance

Students may wish to take part in religious observances that occur during the semester. If you have a religious observance/practice that conflicts with your participation in the course, please contact me before the end of the second week of the semester to discuss appropriate accommodations.

Course Overview (subject to change)

- Week 1 (9/2-6)** ***Introduction to Course and to Each Other***
Lab Session: Individual meetings with instructors. Sign up [here](#).
- Week 2 (9/9-13)** ***Designing Outdoor Learning Experiences***
Gilbertson (Chapters 1-3, 7 – Due Monday 9/9)

Lab Session: Introduction to Curricular Planning

Ordway Retreat
Saturday 8:00 AM - 5:30 PM
- Week 3 (9/16-20)** ***Designing Outdoor Learning Experiences***
Gilbertson (Chapters 4, 8-10 – Due Wednesday 9/18)

Lab Session: Curriculum Planning for Kindergarteners
[Please bring course texts and DNR materials to all curricular planning lab sessions]
- Week 4 (9/23-27)** ***The Peril and Promise of Experiential Learning***
Roberts (Chapters 1-2 – Due Monday 9/23)

Lab Session: Curriculum Planning for Kindergarteners and 2nd/3rd graders
[Please bring course texts and DNR materials to all curricular planning lab sessions]
- Week 5 (9/30-10/4)** ***Experiential Learning: The Sanctity of the Individual***
Roberts (Chapter 3 – Due Monday 9/30)

Lab Session: Kindergarteners from Pine Bend Elementary at Ordway
- Week 6 (10/7-11)** ***Experiential Learning: Social Dimensions***
Roberts (Chapter 4 – Due Monday 10/7)

Lab Session: 5th Graders from Pine Bend Elementary School at Ordway
- Week 7 (10/14-18)** ***Experiential Learning: Political Dimensions***

Roberts (Chapter 5 – due Monday 10/14)

Lab Session: Curriculum Planning for 3rd graders
[Please bring course texts and DNR materials to all curricular planning lab sessions]

Fall Break 10/17-20

Reflective Journal Weeks 1-7 Due (10/16)

Week 8 (10/21-25)

Book Review Presentations!

Book Reviews due 10/21

Week 9 (10/28-11/1)

Experiential Learning in a Neoliberal World

Roberts (Chapter 6 – Due Monday 10/28)

Lab Session: 3rd graders from Capitol Hill at Ordway

Week 10 (11/4-8)

Educating for Sustainability: Philosophy

Nolet (Chapters 1-4 – Due Monday 11/4)

Lab Session: Curricular Units Workshop I

Week 11 (11/11-15)

Educating for Sustainability: Pedagogy

Nolet (Chapters 5-7 – Due Monday 11/11)

Lab session = Tour and discussion with outdoor environmental educators onsite at [Dodge Nature Center](#)

Week 12 (11/18-22)

Educating for Sustainability: Systems Thinking

Nolet (Chapters 8-10 – Due Monday 11/18)

Lab Session: Curricular Units Workshops II with TA

Week 13 (11/25-29)

Educating for Sustainability: Curricular Unit Preparation

Thanksgiving Break 11/27-12/1

Week 14 (12/2-6)

Educating for Sustainability: Curricular Unit Preparation

Lab Session: Curricular Unit work day

Reflective Journal Weeks 8-14 Due (12/6)

Week 15 (12/9-11)

Educating for Sustainability: Moving Forward

Presentation of Curricular Units on M and W

Curricular Units Due (12/17)