

EDHI 682 / EDHI 488E
ECOLOGICAL ETHICS AND EDUCATION
Fall, 2016

Wednesday, 4:15pm - 7:00pm, 1315 Benjamin Building

Instructor: Prof. Jing Lin, College of Education
Co-instructor: Mark Stewart, Office of Sustainability
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Signs of devastation from climate change, environmental degradation, energy crises and conflicts from environmental destructions are causing alarms all around the world. Whether or not we embrace a new ethics for our relationship with nature is a survival issue for the humanity and the Earth planet. What do we need to do? This course explores paradigms, approaches, and new ways of knowing and being through transformative ecological ethics and environmental education.

The course will touch on religious, spiritual, feminist and indigenous perspectives on human-nature relationship. We will critically examine the current paradigms of economic growth and political power, issues of environmental justice and sustainability. We will explore sustainability education in primary, secondary schools and higher education levels. The focus is to equip students with values, attitudes, knowledge, skills and abilities to protect and preserve the Earth planet and live harmoniously with Mother Nature.

OBJECTIVES OF THE COURSE

Students will:

- Learn to critically examine environmental issues and crises;
- Build an understanding of a diverse range of ecological ethical views on Mother nature and environmental sustainability;
- Develop sensitivity and respect for Mother Nature through contemplations, reflections, story sharing and experiential learning;
- Acquire knowledge about environmental education theories and best practices, exploring diverse approaches, programs and pedagogies that enhance students' eco-sustainability understanding and abilities;
- Develop skills to implement changes in K-12 and higher education settings, or in the community and other settings, through doing service learning and research projects for ecological stewardship;
- Demonstrate results of your service learning through intellectual and creative means.

TEACHING APPROACHES

The teaching approach in this course will be an interactive seminar style in which students will be expected to actively engage in discussions and sharing of information and materials, thereby having the opportunities to learn from one another and develop ecological awareness and

experiences. Classes will take on a variety of forms, which will include a combination of lectures, discussions, group activities, showing of videos, and presentations.

EXPECTATIONS

- Students will be expected to come to class having completed all assigned readings for the day and be active participants in the discussions;
- Students will be required to write a summary/reflection essay on each week's readings.

READINGS: Articles are posted on Canvas.

TEXTBOOK: Lin, J. and Rebecca Oxford (eds). (2011). *Transformative Eco-Education for Human and Planetary Survival*. Charlotte, North Carolina: Information Age Publishing.

Buy new: http://www.amazon.com/Transformative-Eco-Education-Planetary-Transforming-Education/dp/161735502X/ref=tmm_pap_swatch_0?encoding=UTF8&qid=&sr=

Buy used: http://www.amazon.com/gp/offer-listing/161735502X/ref=tmm_pap_used_olp_sr?ie=UTF8&condition=used&qid=&sr=

TEXTBOOK: Northwest Earth Institute (2012, 2014). *Choices for Sustainable Living*. Portland, OR: Northwest Earth Institute.

COURSE REQUIREMENTS AND GRADING

1. **Participation: 20%.** Students are expected to have done the readings, and to actively participate in the activities of the class.
2. **Weekly Reflection Essay on Class Reading Materials. 20%.** Students will read at least 3 readings of the week and write 1 to 1.5 pages single-space each week; please send it to jinglinpeace@gmail.com before each class. Synthesize what you have learned, what key concepts/ideas that impressed you, what connections you can make to daily life and education, and questions/points you will raise in class.
3. **Essay on “Experience with Nature, and Alternative Ethics, Energy and Life Styles.” 20%.** The first part of the paper will be on your most powerful experience with nature and how that educates you and shapes you? Along with your paper, you can use poems, videos, pictures or other forms to share the experience. The second part is research on alternative ethics, energy, new forms of sustainable technology, sustainable economy or new life styles. (6-7 pages)
4. **Final Project. 40%** (undergraduate: 10-12 pages; graduates: 15 pages).

A service learning project; A research on a local environmental problem and effective solutions including educational solutions; A detailed, research-based proposal for an environmental education project or curriculum for a school or community.

For the projects:

1. Location needs to be identified; Partnership should be formed.
2. Students are to define needs, ask the relevant questions, design service/research and learning activities, and build observation and reflection into the process.
3. Relevant literature should be searched and referenced. Pictures could be taken or video be made or website be designed.
4. The Final Project will be a portfolio containing the above elements and a reflective essay.
5. Reflection: How can the project be improved? Looking back, how have you grown personally through the service? What is your plan down the road?

Grading Scale

96-100 A+	87-89 B+	76-79 C+	64-67 D+
93-95 A	84-86 B	72-75 C	60-63 D
90-93 A-	80-83 B-	68-71 C-	<60 F

Writing expectations:

Correct formatting and APA reference format; clarity and precision of expression; organization and coherence of idea; multiple sources; depth and substance of views and arguments; grammar and typo-free.

COURSE EVALUATION

As a member of our academic community, you as a student have a number of important responsibilities. One of these responsibilities is to submit your course evaluations each term through CourseEvalUM in order to help faculty and administrators improve teaching and learning at Maryland. Please watch for the dates the system will open for evaluation of the semester and make a note of the link at which you can access the submission system:

<https://www.courseevalum.umd.edu/>

COURSE SCHEDULE

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**AUGUST 31: INTRODUCTION AND OVERVIEW**

### **Awareness raising:**

- TED: *The case for optimism on climate change* by Al Gore. [Mark has a copy]
- Song: Tell me why!
- The 2015 Paris Agreement: Humanity in critical crossroad!  
<http://www.cnn.com/2015/12/12/world/global-climate-change-conference-vote/>
- Using campus and local communities as living labs for sustainability [Mark for ppt]

Mark Stewart, Senior Project Manager, UM Sustainability Office, will come to class to discuss service learning opportunities.

### **Possible projects:**

- Dennis Nola: Designing Landscape with Edible Plants (dnola@umd.edu)
- Service learning opportunity with Beth Novick on social justice issue, environmental education etc. Beth Novick, Talented and Gifted Coordinator, Kenmoor Middle School [bnovick@pgcps.org](mailto:bnovick@pgcps.org), Office - 301-925-2300, Cell - 240-398-6225
- Eco City Farm: <http://www.ecoffshoots.org/get-involved/volunteering/>
- Global Learning Living Program; Language House
- Also contact Edgar Moctezuma, Instructor, Dept. of Cell Biology and Molecular Genetics. (301) 405-1638

### **Contemplative ways to bring wonder and awe back to nature: Weekly contemplative engagement with nature**

- **180 degree scan of your environment and nature**
- Read: Mountain Thoughts by John Muir
- Types of contemplative methods: <http://www.ianbanyard.com/home/cotswold-natural-mindfulness/mindfulness-walking-exercise/> ;  
<https://www.youtube.com/watch?v=7nsmuPT7Zfw>
- <http://www.shiftyourlife.com/2011/nature-awareness-mindfulness-the-sit-spot/>
- Voluntary report to class at beginning of each class

## **SEPT. 7: MAJOR ENVIRONMENTAL CHALLENGES FACING HUMANITY TODAY**

❖ *Weekly report: Your engagement with nature*

### **Act 1: Learn to do a body scan for yourself, then do one for Mother Nature. Share:**

- What do you feel for Mother Nature? What images come to your mind?
- What problems are besetting Mother Nature?
- What concern you the most, and why?

### **Act 2: Jing's ppt presentation**

- Global warming; climate change; glacier retreat; melting of ice caps
- Natural disasters: earthquakes, hurricanes, tsunamis, typhoons, sea levels rising and islands and countries disappearing; flooding and severe drought (war in Syria).
- Ozone layer depletion and health impact

- Deforestation; desertization; dust storms; land loss; top soil erosion; use of fertilizer and pesticides and damages to the soil, ocean, rivers and human health
- Fog and haze – China as an example
- Mass extinction of species and loss of biodiversity
- Water scarcity; water pollution; rivers dying; overdrawn of underground water; danger of war and conflicts due to water resources in Southeast Asia and Africa
- Disappearance of lakes, wetlands and corral reefs; and pollution of oceans
- The cost of “development” – Smog and pollution: water, air, land
- Problems of trash and waste and environmental and human damages
- Overpopulation, urbanization and major problems
- Energy crises: over extraction of oil; food crises; inflation.
- Western Honey Bee Colony Collapse Disorder
- Diseases: autism, Ebola, viruses, etc.
- Wastage
- Capitalist market ideology

**Act 3: Students give a 5 minute talk on a topic of their choice.**

**Readings:**

Diamond, J. Easter’s End. In Northwest Earth Institute (2012, 2014). *Choices for Sustainable Living*. Portland, OR: Northwest Earth Institute.

Miller, V. (2016). How to carry on?  
Enduring the predicaments of apocalyptic leadership gracefully. In Vachel Miller (Ed., 2016), *Educational Leadership for an Apocalyptic Moment of Hope*. Information Age Publishing.

Carson, Rachel. (1963). Excerpts from *Silent Spring* New York: Houghton Mifflin.

Lin and Oxford. (2011). Introduction. **Textbook**

Hartmann, Thom. (2004). *The Last Hours of Ancient Sunlight*. New York: Three Rivers Press, pp. 1-31; pp. 42-59.

**THE SPECIES EXTINCTION ARTICLE**

Global warming worsens with record temps, widespread coral bleaching:

<http://usat.ly/27rE8Am>

Radford, Tim. Two-Thirds of the World Resources “Used-Up.” *The Guardian*, Wednesday 30 March 2005. <http://www.guardian.co.uk/science/2005/mar/30/environment.research>

“Overpopulation.” Wikipedia.

Boulding, E., Brigagao, C., and Clements, K. (1991). Earth as Peace Teacher. In *Peace, Culture and Society*. Boulder, Colorado: Westview Press.

Wilson, E. O. (1988). The Current State of Biological Diversity. In E.O Wilson (ed), *Biodiversity* (pp. 3-18). Washington, D.C.: National Academy Press.

Hawken, Chp 3 “The creation of waste,” pp. 37-55.

Klein, Naomi. (2014). *This Changes Everything: Capitalism Vs The Climate*. Book review by David Archer. Whole book online: <http://thischangeeverything.org/book/>

## **SEPT. 14 HUMAN-NATURE RELATIONSHIP AND ECO ETHICS FROM RELIGIOUS AND CULTURAL PERSPECTIVES**

❖ *Weekly report: Your mindful engagement with nature*

❖ All lives are sacred! <http://www.wenxuecity.com/news/2014/06/04/3327885.html>

**Act 1: Using the scenario of a child and a chicken, discuss the notion of anthropocentrism, and discuss where various religions fall on a spectrum of anthropocentrism. Discuss zoos, human treatment of health crises, culture and human nature.**

- **Topic 1: Anthropocentrism**
  - Anthropocentrism
  - Capitalism and its ethos against nature
  - Materialism
  - Consumerism
  - Christianity
  
- **Topic 2: Interconnectedness and Interdependence**
  - Taoism/Confucianism
  - Buddhism
  - Muslim
  - Shamanism
  - Hinduism, Jainism, Shinto....
  - Naturalism
  - Transcendentalism

**Act 2: Discuss these questions:**

- How do we view ourselves in relation to nature?
- What are the fundamental causes underlying the environmental crises/problems of today?
- How does spirituality/religion shape the way we view the environment?

### **Readings:**

“Anthropocentrism.” Wikipedia. Mindful reflection on how we see ourselves as above other existence

White, Lynn, Jr. (1967). The Historical Roots of Our Ecological Crisis. *Science* 155: 1203-1207.

Deloria, V. (2001). American Indians and the Wilderness. Pp.

Haddad, Marwan. (2006). An Islamic Approach Towards Environmental Education. *Canadian Journal of Environmental Education*, vol. 11, no. 1, pp. 57-73

Gross, Rita M. (1997). Towards a Buddhist Environmental Ethic. *Journal of the American Academy of Religion*, vol. 65, no. 2, pp. 333-353.

“Indigenous Tradition and Ecology”:

“Buddism and Ecology”

“Christianity and Ecology”

“Janism and Ecology”

“Judaism and Ecology”

“Confucianism and Ecology”

“Taoism and Education” by Jing Lin

## **SEPT. 21: NEW ECO ETHICS AND PARADIGMS**

❖ *Weekly report: Your mindful engagement with nature*

**Act 1: students each choose a topic in the textbook to present their ideas; students will also research and share with class new eco frameworks/ethics as listed below:**

### **Topics: New Paradigms**

- Ecofeminism
- Deep Ecology
- Gaia Theory – meditation on Earth as a Live Being
- Biodiversity
- Bioregional Thought and Practice (Becky Bircher)
- Intergenerational Thinking
- Tragedy of the Commons
- Systems Thinking (Chapter 2, Vachel Miller)
- Sustainability “Triple Bottom Line” and Worker-Owned and Worker Managed Companies
- Biomimicry
- True Cost Accounting
- Active Hope and Adaptive Leadership, Power of Pause, Sense of Place and Mindful Gratitude (Chapter 3, Vachel Miller)
- Spiritual emergencies (Chapter 4, Vachel Miller)
- Wellbeing of bio-sphere and shared matrix of life
- Sustainable IT manufacturing, management and use, and disposal

## Readings:

Bai, H. (2013). Peace with the Earth: Animism and contemplative ways. *Cultural Studies of Science Education, CSSE*, 2 (8).

Warren, Karen. (1993). An Introduction to Ecofeminism. In Michael E. Zimmerman et al. (eds.), *Environmental Philosophy: From Animal Rights to Radical Ecology* (pp. 253-267). Englewood Cliffs, NJ: Prentice-Hall, 1993.

Haigh, M. (2006). Deep Ecology Education: Learning from its Vaisnava Roots. *Canadian Journal of Environmental Education*, vol. 11, pp. 43-56.

Sahtouris, Elisabet. (1989). *Gaia: The Human Journey from Chaos to Cosmos*. New York: Pocket Books. Pp. 19-28; 63-75.

Lenton, Timothy and Marcel van Oijen. (2002). Gaia as a Complex Adaptive System. *Philosophical Transactions: Biological Sciences*, vol. 357, no. 1421, pp. 683-695.

**TEXTBOOK:** Northwest Earth Institute (2012, 2014). *Choices for Sustainable Living*. Portland, OR: Northwest Earth Institute.

- (Chapter 3, Vachel Miller)
- Spiritual emergencies (Chapter 4, Vachel Miller)

## Act 2: ppt by Jing

## SEPT 28 ENERGY RESOURCES, BUSINESS AND GOVERNMENT PRACTICES, AND LIFE STYLES

### Topics: Sustainable Development and New Business Practice

- Ecological Economics; de-growth; divestment; alternative investment; Green GDP
- Land rights for the indigenous people; Stopping Farming to reforest the land
- Ecological farming//sustainable forestry
- Ecological Architecture; green technology for green schools and universities
- Green-collar jobs
- Eco city farms

### Topics: Alternative Energy and New Technologies

- Clean, renewable and environmentally friendly energies
- New energy technology; solar, wind and other forms of energy
- New cars, materials
- Profitable and sustainable technology
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### Topics: New Life Styles



- Life style changes: summer air conditioning; office light; business suit; plastic shopping bag, and others...
- Eco villages; vegetarianism; organic food and local markets
- Treatment of animals; food industry and student and environmental groups
- The infinite mind and energy and social transformation

**Topics: Good Governance: Private, Public and Civic Sectors**

- Kyoto Protocol; Paris Agreement
- Carbon tax
- Emission trade; carbon credit: six exchanges that trade them.
- Toxic Substances Control Act (2016)
  - Legality does not mean it is right: emission of pollutants from air conditioning to lake that kills a large number of fish
- Natural gas: increasing use and leaking problem
- 1.5 billion people go to bed without turning off light
- Green accounting; green economy; green finance; eco commerce
- Green building: LEED – Leadership in Energy and Envir. Design
- Sustainable transport
- “Just sustainability” - <http://smartandsustainable.umd.edu/sessions/opening-keynote>
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**Readings:**

Nature is sacred: <http://www.wenxuecity.com/news/2014/06/04/3327885.html>

**TEXTBOOK:** Northwest Earth Institute (2012, 2014). *Choices for Sustainable Living*. Portland, OR: Northwest Earth Institute.

Fleming, P. & Macy, J. (1988). The Council of All Beings. In Bohannon, R. (2014). *Religions and Environments: A Reader in Religion, Nature and Ecology*. Pp. 63-71.

Woodard, H. C., & Orr, R. L. (2015). Green Technology for Green Schools. In Chan, T. C., et al. (eds). *Marketing the Green School: Form, Function, and the Future*. Hershey, PA: IGI Global. Pp. 106-117.

Tompkins, P. and Bird, C. (1973). *The Secret Life of Plants*. Excerpts. New York: Harper and Row.

“Biodiversity”. Stanford Encyclopedia of Philosophy.

“Sustainable Development”. Wikipedia.

“Reconstructing Femininity and Masculinity” by Jing Lin

**Recommended readings:**

Bai, Heesoon. (2009). Re-animating the universe: Environmental education and philosophical animism. In M. McKenzie, H. Bai, P. Hart & B. Jickling (Eds.), *Fields of green: Restorying culture, environment, education* (pp. 135–151). New Jersey: Hampton Press.

“Ecological Economics” by Farber and Bradley. <http://www.fs.fed.us/eco/s21pre.htm>

Jackson, Tim. (2009). “Forward by Herman Daily”; Chapter 1, “Prosperity Lost”; Chapter 11, “Transition to a Sustainable Economy.” In *Prosperity without Growth: Economics for a Finite Planet*. London: Earthscan.

## **OCT. 5: EXPERIENCE WITH NATURE, AND ALTERNATIVE PARADIGMS, LIFE STYLES, ENERGY, AND TECHNOLOGIES**

### *Presentation and paper due*

- What gives you the most powerful experience in education about nature and environment? What significant events/people impact you? Students will share stories about personal experiences.
- Research on alternative energy, new forms of sustainable technology, sustainable economy or new life style.
- **Discuss core competencies for sustainability after the presentation.**

## **OCT. 12: NATURE DEFICIT DISORDER, AND PRINCIPLES AND THEORIES OF ENVIRONMENTAL EDUCATION**

❖ *Weekly report: Your mindful engagement with nature*

❖ *Sharing of ideas for service learning projects*

**Act 1:** Students form into teams to discuss the main ideas in the readings and give a presentation on the following:

- Nature Deficit Disorder: What is it? How is it manifested? Why?
- Industrial mechanistic views in curriculum: examples
- Anthropocentrism in textbooks: examples
- Values for ecological and environmental education: holistic education, social responsibility, creativity...
- Ecological intelligence and integrated intelligence: How to develop them?
- Recovering “childhood”: What do we need to do in all levels?

**Act 2: Activity: Core Competencies for Sustainability**

### **Website: No Child Left Inside Movement**

[https://en.wikipedia.org/wiki/No\\_Child\\_Left\\_Inside\\_\(movement\)](https://en.wikipedia.org/wiki/No_Child_Left_Inside_(movement))

## **Readings:**

George Monbiot. (2012). If Children Lose Contact with Nature They Won't Fight for It. The Guardian. <http://www.theguardian.com/commentisfree/2012/nov/19/children-lose-contact-with-nature>

Louv, Richard. (2006). *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*. Chapel Hill, NC: Algonquin Books of Chapel Hill. Pp. 54-111.

LeFay, Raven. (2006). An Ecological Critique of Education. *International Journal of Children's Spirituality*, vol. 11, no. 1, pp. 35-45.

Robert Jensen. (2016). Apocalyptic teaching: Facing our fears and teaching through tears. In Vachel Miller (Ed., 2016), *Educational Leadership for an Apocalyptic Moment of Hope*. Information Age Publishing.

Benjamin Redekop & Isaac Schliefer. (2016). The eco-leadership paradigm in the classroom and beyond. In Vachel Miller (Ed., 2016), *Educational Leadership for an Apocalyptic Moment of Hope*. Information Age Publishing.

Lin, Jing. (2006). "Education for Human-Nature Harmony". In *Love, Peace and Wisdom in Education: Vision for Education in the 21<sup>st</sup> Century*. Lanham, MD: Rowman and Littlefield Education.

Lin, Jing. (2006). "The Development of Integrated Intelligence". In *Love, Peace and Wisdom in Education: Vision for Education in the 21<sup>st</sup> Century*. Lanham, MD: Rowman and Littlefield Education.

## **OCT. 19: ENVIRONMENTAL EDUCATION AROUND THE WORLD AND IN THE U. S.**

❖ *Weekly report: Your mindful engagement with nature*

**Act 1: Nooruddin Shah presents on India and Parkistan**

**Act 2: Jing Presents on China**

**Act 3: Student teams present on Costa Rica, Africa and other countries/continents**

**Discussion: what are the common challenges? What are the solutions?**

## **Readings:**

Lin, J. and Heidi Ross. (2005). Addressing Urgent Needs: The Emergence of Environmental Education in China. *Woodrow Wilson Environmental Series*, issue 7, pp. 74-78.

Indigenous Knowledge, Environment, and Education in Africa. *Simon Thurania Taaliu*.  
**Textbook**

Blum, N. (2008). Environmental education in Costa Rica: Building a framework for sustainable development? *International Journal of Educational Development*, 28(3), 348-358.

Blum, N. (2009). Teaching science or cultivating values? Conservation NGOs and environmental education in Costa Rica. *Environmental Education Research*, 15(6), 715-729.

Iyengar, R., & Bajaj, M. (2011). After the Smoke Clears: Toward Education for Sustainable Development in Bhopal, India. *Comparative Education Review*, 55(3), 424-456.

Chance, S. M., & Cole, J. T. (2015). Enhancing building performance and environmental learning: A case study of Virginia Beach Public Schools. In Chan, T. C., et al. (eds) (2015). *Marketing the Green School: Form, Function, and the Future*. Hershey, PA: IGI Global. Pp. 54-73.

Ozer, E. J. (2007). The Effects of School Gardens on Students and Schools: Conceptualization and Consideration for Maximizing Healthy Development. *Health Education & Behavior*, 34 (6), pp. 846-863.

### **Readings Recommended:**

Manteaw, O. O. (2012). Education for sustainable development in Africa: The search for pedagogical logic. *International Journal of Educational Development*, 32(3), 376-383.

## **OCT. 26: ENVIRONMENTAL EDUCATION IN THE UNITED STATES**

❖ *Weekly report: Your mindful engagement with nature*

**Act 1:** Group discussion on the readings; summarizing the main ideas in the readings.

**Act 2:** *Students form groups to design an eco tour, eco/sustainable fashion, a school garden, a field trip, or a learning community that incorporate indigenous wisdom. Discuss: What is your rationale? What are the activities? How can the students be truly transformed?*

- Installing solar system to power classrooms
- School gardens
- Alternative breaks
- Ecotourism
- Eco fashion
- Science programs or curriculum that incorporate knowledge of sustainability

- Field trips

Find an article on land-based education.

The Chesapeake Bay Foundation Education Program: <http://www.cbf.org/education-program/participate-in-an-education-program>

Scott Morrison, Aaron Sebens, & John Heffernan. From pond scum to solar panels: Creating a culture in which ecologically-minded teachers thrive. In Vachel Miller (Ed., 2016), *Educational Leadership for an Apocalyptic Moment of Hope*. Information Age Publishing.

Courtney Baines. Small changes with deep roots. In Vachel Miller (Ed., 2016), *Educational Leadership for an Apocalyptic Moment of Hope*. Information Age Publishing.

Putney, D., Morris, R. C., & Sargent, P. R. (2015). Toward a green curriculum: Transforming the school house and classroom. In Chan, T. C., et al. (eds). *Marketing the Green School: Form, Function, and the Future*. Hershey, PA: IGI Global. Pp. 194-210.

A Transformative Paradigm of Global Literacy: Short-Term International Service-Learning in Ecotourism. *David Urias*     **Textbook**

Eco-Fashion: What Educators Can and Should Teach about Sustainable Fashion. *Rebecca L. Oxford*     **Textbook**

Ouden, Katie D, and Wee, Bryan Shao-Chang. (2011). Social Responsibility through School Community Gardens: Cultivation of social responsibility through school community gardens.     **Textbook**

Project WetKids: An Out-Of-School Program Fostering Citizen Scientists in the Middle Years. Julie Cwikla & Christopher Barry.     **Textbook**

Farmer, J. et al. (2007). An Elementary School Environmental Education Field Trip: Long-Term Effects. *The Journal of Environmental Education*, vol. 38, no. 3, pp. 33-42

### Recommended

Rahm, J. (2002). Emergent Learning Opportunities in an Inner-City Youth Gardening Program. *Journal of Research in Science Teaching* , 39 (2), pp. 164-184.

Taylor, P. (2006). Earth's Careful Gardeners. *Arts & Activities*;Apr 2006, Vol. 139 Issue 3, p48.

## **NOV. 2     TEACHING SCIENCE, AND ARTS AS AN INSTRUMENT OF SUSTAINABILITY EDUCATION**

*Weekly report: Your mindful engagement with nature*

**Act 1: Mid point sharing of Final Project**

**Act 2: Timothy Reed gives a demonstration of an environmental science education class**

**Act 3: Class discuss ideas they can use to teach about global climate change, to raise awareness etc, and share with class**

**Readings:**

Necessary Tensions within Present Possibilities: Juxtaposing Voices from the Field to Envision Sustainability Teaching and Learning. *Molly Lawrence, Rosalie Romano, Victor Nolet, and Wendy Church* **Textbook**

Beyond a Carbon Copy Curriculum: Cultivating Stewardship and Awareness through Sustainable Education. *Nathan S. Hensley* **Textbook**

Changing Science Teacher Education in a Changing Global Climate: Telling a New Story *J. Randy McGinnis, Emily Hestness, and Kelly Riedinger* **Textbook**

**Readings Recommended:**

Bowers, C. A. (1993). Anthropocentrism in Textbooks. In *Education, Cultural Myths and the Ecological Crisis*. Albany, NY: SUNY Press.

Hutchison, D. (1998). Chapter 6: The Recovery of the Earth Process through Childhood. *Growing up green: Education for ecological renewal*. New York: Teachers College Press.

**Act. 4. Creativity in ecological education through arts, films, music, poems, sports and various other creative approaches**

- Students find arts, music, poems, videos etc, to share in class: how do they contribute to the building of a sustainable ecological ethics and education?
- Discussion on the readings

**Readings:**

Lankford, Louis E. (1997). "Ecological Stewardship in Art Education." *Art Education*, vol. 50, no. 6, *Art and Ecology* pp. 47-53.

Sun, Xiaoyan Jing Lin. (2011). Chinese Landscape Painting and Taoism: Reflection on Environmental Education. **Textbook**

Edwards, Sachi. (2013). Using Hula to teach personal, interpersonal and environmental peace. In J. Lin, R. Oxford & E. Brantmeier (Eds), *Embodies pathways to wisdom and social transformation* (pp. 23-32). Charlotte, NC: Information Age Publishing. Pp. 264-281.

Orr, D. (1994). *Earth in Mind: On Education, Environment, and the Human Prospect*. Washington, DC: Island Press.  
“Forest and Trees,” pp. 64-69;  
“Architecture as Pedagogy,” pp. 112-116.

Neperud, Ronald W. (1997). Art, Ecology, and Art Education: Practices and Linkages. *Art Education*, Vol. 50, No. 6, *Art and Ecology*, pp. 14-20.

Thoreau, H. D. “Walking.” (1862). In Chan, T. C., et al. (eds) (2015). In Bohannon, R. (2014). *Religions and Environments: A Reader in Religion, Nature and Ecology*. Pp. 19-30.

- Music: (<https://www.youtube.com/watch?v=4mEbABPtTv8>)
- Arts: <http://www.bioneers.org>

## **NOV. 9: SUSTAINABILITY INITIATIVES AT UMD AND IN COLLEGES AND UNIVERSITIES**

*Guest Speaker: Mark Stewart, Senior Project Manager, UM Sustainability Office*

**Ppt by Jing**

### **Readings:**

Stewart, M. (2011). Greening the Campus, Culture, and Curriculum. **Textbook**

Bell, R. and Bradley, K. (2011). How to Change: Two Cases in Building Resilience. **Textbook**

Butenwieser, S. W. (Winter, 2008). Greening the Ivory Tower. *Earth Island Journal*. Pp. 34-38.  
[http://www.earthisland.org/journal/index.php/eij/article/greening\\_the\\_ivory\\_tower/](http://www.earthisland.org/journal/index.php/eij/article/greening_the_ivory_tower/)

McMillan, E., Wright, T. & Beazley, K. (2004). Impact of a University-Level Environmental Studies Class on Students' Values. *Journal of Environmental Education*, 35(3), 19- 28.

Orr, D. W. (1995). Educating for the Environment: Higher Education Challenge for the Next Century. *Change*, 27, pp. 43-46.

*New forms of ranking: Sierra Club and Princeton Review*

<http://www.sierraclub.org/sites/www.sierraclub.org/files/sierra/coolsschools/2014/pdfs/2014-02-26-university-of-maryland-college-park-md.pdf>

The endeavors of Dr. Marla McIntosh (websites)

## **NOV. 16: ECO-JUSTICE AND ENVIRONMENTAL ADVOCACY**

❖ *Weekly report: Your mindful engagement with nature*

**Act 1: Film: “Taking Root: The Vision of Wangari Maathai”**

**Act 2: Students discuss issues of environmental justice and challenges to meet the needs of the most disadvantaged people**

### **Topics:**

- Social Justice and fair Distribution
- Indigenous land rights
- Environmental justice
- Just transition
- Health equity
- Food security
- Cultural diversity and indigenous tradition/knowledge
- Microcredit and microenterprise

### **Readings:**

Maathai, W. (2010). Sacred Groves, Sacred No More. In Bohannon, R. (2014). *Religions and Environments: A Reader in Religion, Nature and Ecology*. Pp. 195-200.

### **USE ARTICLE ON THE RICH AND THE POOR**

Cone, J. (2000). Whose Earth Is It, Anyway? In Bohannon, R. (2014). *Religions and Environments: A Reader in Religion, Nature and Ecology*. Pp. 329-336.

Kearns, L. (2012). Religion and Environmental Justice. In Chan, T. C., et al. (eds). *Marketing the Green School: Form, Function, and the Future*. Hershey, PA: IGI Global. Pp. 297-311.

Bowers, C. A. (2002). Towards an Eco-Justice Pedagogy. *Environmental Education Research, 1*, 21-34.

## **NOV. 23 NO CLASS THANKSGIVING**



**NOV. 30      EMERGENCY AND DISASTER-RELIEF EDUCATION, and HEALING OURSELVES AND HEALING THE EARTH**

- Natural Disasters around the world and rescue efforts;
- Efforts to provide disaster education afterwards
- Focus of emergency education
- Healing and reconstruction
- Beyond 2016: Global climate change and what we need to do?

**Readings:**

Fu, L. and Lin, J. (2011). Disaster Education in Schools in China: Helping Students Cope with Disasters: Thoughts after the 5.12 Wenchuan Earthquake. **Textbook**

Buffy Kirby. (2016). What Teachers throughout all Disciplines should know about “Disaster Relief”: Planning and Education for Students ‘*Lessons from the Great East Japan Earthquake and Tsunami*’. Unpublished paper.

Geiger, A., Kawauchi, K. & Bellamy, S. (2015). *Innovative disaster responses: Model approaches from Japan’s 3/11 disaster*. Tokyo: JCIE.

UN Sustainable Development Goals, 2015.

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Berry, T. (1999). The Wild and the Sacred. In Bohannon, R. (2014). *Religions and Environments: A Reader in Religion, Nature and Ecology*. Pp. 73-78.

Global Transformation: Breakdown and Breakthrough

Orr, D. (1994). Love It or Lose It: The Coming Biophilia Revolution. In *Earth in Mind: On Education, Environment, and the Human Prospect*. Washington, DC: Island Press. Pp. 131-153

UNESCO. (2012). Report on the UN Decade of Education for Sustainable Development, Shaping the Education of Tomorrow. Read here:  
<http://unesdoc.unesco.org/images/0021/002164/216472e.pdf>

**DEC. 7:      FINAL PROJECT PRESENTATION**