

Donna Charley-Johnson
Ecosphere in Crisis 26-104
Lab Syllabus
Section A05, A06, A07
Halsey Science 110

Instructor: Donna Charley-Johnson, B.A., M.S.

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Office Hours: Thursday 11:00-1:00

Objectives:

- To supplement concepts presented in lecture with hands-on, experiential, and inquiry based activities and discussions,
- To emphasize a significant understanding of the basic scientific principals and thereby facilitate educated decision making,
- To provide the opportunity to assess personal environmental impact generally as well as more specific quantitative analyses,
- To present materials from the perspective of sustainability and solutions, i.e. yes, we know things are bad, so what can we do about it?
- To present material with relevance to Wisconsin.

Grading: Lab is worth 1/3 of your final grade. Your lab grade will be determined as follows:

Assessments (2)	= 50%
Assignments	= 30%
Participation/Attendance	= 20%

Assessments: The first of these will be a short (approximately 45 minutes) series of questions that ask the student to express and apply the information studied in previous weeks. The Final Assessment will be cumulative and open note.

Assignments: Unexcused late assignments will NOT be accepted. If you are sick or otherwise unable to attend lab either email the assignment or make arrangements to make up the assignment prior to the missed lab.

Participation: Will be tallied on a weekly basis based on your vocal participation in class activities.

Attendance: Attendance will be taken at the beginning and, if necessary, end of class.

Academic Policy: Late assignments will not be accepted. If you decide to cheat or engage in other forms of academic dishonesty you will be subject to the Student Academic Disciplinary Procedures as outlined in the Student Disciplinary Code (<http://www.uwosh.edu/dean>).

Schedule (subject to changes):

Wk	Date	Subject	Activities
1	Feb 2 and 3	Introduction: Doom and Gloom versus Hope	Introduction: An Ecosphere in Crisis? Ecological Footprint Assignment Due Ecological Footprint Discussion Film: "The 11 th Hour"
2	Feb 9 and 10	What is "Sustainability" and how are ecosystems sustainable?	Reading: Sustainability Primer by Baxter, et.al. http://www.iusb.edu/~csfuture/Primer_USEdition_print_072009.pdf Discussion: Biomimicry
3	Feb 16 and 17	Human Population: Wealth versus Happiness	Introduction: Human Population Film: "World in the Balance: Nova" Discussion/<u>Affluenza</u> Activity (Wann, de Graaf, Naylor)
4	Feb 23 and	Food: Agricultural Solutions for	Reading: Excerpt from <u>The Alchemy of</u>

	24	6.8 Billion People?	<p>Air by Thomas Hager</p> <p>FIELD TRIP: Rosendale Concentrated</p> <p>Animal Feeding Operation</p>
5	March 1 and 2	Food: Viable Alternatives and Diversity in Agriculture	FIELD TRIP: Boerson Organic Farm
6	March 8 and 9	How and Why to save Nature	<p>Reading: “Ecosystem Services: Benefits Supplied to Human Societies by Natural Ecosystems” by Daily, et.al.</p> <p>http://www.esa.org/science_resources/issues/FileEnglish/issue2.pdf</p> <p>Discussion</p>
7	March 15 and 16	Assessment #1	Assessment #1
8	March 22 and 23	Spring Break	Spring Break
9	March 29 and 30	Land Use	<p>Soil Lab</p> <p>Soil Lab Assignment Due</p>
10	April 5 and 6	Water Resources: Wetlands and Ecosystem Services	<p>Reading: <u>Water: Adapting to a New Normal</u> by Sandra Postel</p> <p>http://www.postcarbon.org/Reader/PCReader-Postel-Water.pdf</p> <p>FIELD TRIP: Terrell’s Island Wetland</p>
11	April 12 and 13	Climate Change: Forget about temperature; let’s talk about the water cycle!	<p>“Personal Water Consumption”</p> <p>Assignment Due at the beginning of class!!</p> <p>Reading: Excerpt from <u>The Vanishing Face of Gaia</u> by James Lovelock</p> <p>Basic Climate Change Science Discussion</p> <p>Evapotranspiration Experiment</p>

12	April 19 and 20	Energy: Treatment for Society's Oil Addiction	<p>Evapotranspiration Assignment Due at the beginning of class!!</p> <p>Reading: Peak Oil Primer by the Post Carbon Institute</p> <p>http://www.energybulletin.net/print/45469</p> <p><i>Oil Resources Presentation</i></p>
13	April 26 and 27	An Alternative to Solid Waste	<p><i>Personal Energy Consumption</i></p> <p><i>Assignment Due at the beginning of class!</i></p> <p>FIELD TRIP: Recycling Adventure</p>
14	May 3 and 4	Ecosystems: A trip through time in the valley of Crystal Creek	<p>Reading: Excerpt from <u>Seeing Nature</u> by Paul Krafel</p> <p>FIELD TRIP: South Woods</p>
15	May 10 and 11	Assessment #2	Assessment #2