

## Paths to Sustainability

### I. Course information

<b>Professor</b>	Brendon Larson, Ph.D. (Office: EV2 2016)
<b>Contact</b>	Email is the best way to reach me: blarson "at" uwaterloo.ca. On weekdays, I normally check my email in late morning or early afternoon and then late afternoon.
<b>Office hrs</b>	TBD (based on everyone's schedule) and by appointment
<b>Class meetings</b>	Wednesdays 11:30-2:20pm in RCH 112
<b>Readings</b>	See below. There are two course books. Other weekly readings will be in LEARN.
<b>Fees</b>	We will order juggling beanbags from Kind of Magic (321 Weber St. N., <a href="http://www.kwmagic.com">http://www.kwmagic.com</a> ) during the first week of class. The owner, Phil, gives us a group rate; depending on quality, three beanbags will cost \$4.25-\$18 (or more).
<b>LEARN</b>	Course dropboxes will be posted on LEARN ( <a href="http://learn.uwaterloo.ca">http://learn.uwaterloo.ca</a> ). I will also communicate with you using course emails through LEARN (rather than "news"), which will be sent to your uwaterloo account. You can set your account to forward these emails to another e-mail account (e.g. Hotmail, Gmail, Yahoo).

### II. Course overview and learning outcomes

This experiential, inspiring, integrative, and reflective course examines the everyday significance of several "metaphors we live by," both as citizens and environmentalists, including "life as a journey" (e.g., "walking the path" in the course title), "awakening" and "balance." Metaphors are not just rhetoric, but in many respects structure our lives and the world around us (including blocks to sustainability). They are thus utilized as a transdisciplinary, integrating device for understanding the structure of socio-ecological systems in this course. The course examines the links between language, worldview, and sustainability by comparing and contrasting alternative metaphors used in sustainability discourse, including ecological balance and health, ecosystem services, management, planetary boundaries, resilience, restoration, and others.

In a previous version of this course, one of its most popular components was that students learned to juggle as an embodied way to explore metaphors for "walking the path of sustainability," so this will be included in this revised, elective version of the course. This component instantiates my commitment that this be one of the most enjoyable, rewarding, and stimulating courses of your undergraduate degree and an inspiration to continued deep, life-long learning after you graduate.

By the end of this course, through group discussions, small group activities, and readings, you should be able to do the following (our course learning outcomes):

1. **understand** and **express** the significance of metaphors (and language, more generally) in the formation of your worldview and way of living—as well as that of society more generally;
2. critically **examine** the role of key metaphors that serve to structure environmental understanding and action to **evaluate** the extent to which they (or alternatives) can help facilitate a transition to more sustainable futures; and
3. **learn** how to juggle to lessen "gloom-and-doomitis" and to develop further insight into yourself, your learning, and alternative metaphors for "walking the path of sustainability."

### III. Course schedule

Note that this schedule is a guide only and may be subject to change (of which you will be notified in advance). **You will be expected to have read course readings before each class meeting** (though there are some choices in the list below); note that I may assign additional short, timely articles for you to read (e.g., news). The class session will mostly be structured around mini-lectures and discussions, along with regular juggling practice (as a mid-way break in each class) and a writing workshop.

Week. Topic Date	Activities (subject to change)	Readings (read <u>before</u> Monday's class)
1. <b>Introduction</b> Jan. 6	<u>Video</u> : Hirshfield	
2. <b>Language and sustainability</b> Jan. 13		Orwell 1946; Mills 1982 (skim); Chawla 1991; Schultz 2001; Boroditsky 2003
3. <b>Metaphor and sustainability</b> Jan. 20		Reddy 1979 <u>or</u> Schön 1979; Carolan 2006 <u>or</u> Goatly 2007; Princen 2010; Larson Chapter 1
4. <b>The juggling metaphor</b> Jan. 27	Juggling introduced	Gopen and Swan 1990; Chandler 1991; Gelb and Buzan 1994; Ison 2010
5. <b>TBD</b> Feb. 3	<u>Read ahead</u> : e.g., Larson; <i>Siddhartha</i>	
6. <b>Life is a journey &amp; "awakening"</b> Feb. 10	<u>Videos</u> : Hero's journey; Pigeons First metaphor assignment due (Oct. 23)	Hesse's <i>Siddhartha</i> ; Kabat-Zinn 1994; Blackmore 2000; Milne et al. 2006; Larson Chapter 2
7. <b>Boundaries and limits</b> Feb. 24	<u>Video</u> : Competing jugglers	Davidson 2000; Larson Chapters 3 and 4; Nordhaus et al. 2012
8. <b>Consumption and services</b> Mar. 2	<u>Video</u> : Watts	Ende 1984; Goodhew and Loy 2002; Norgaard 2010; Larson Chapter 5
9. <b>Balance, health, and resilience</b> Mar. 9		Ross et al. 1997; Ladle and Gillson 2009; Larson Chapter 6
10. <b>Managing and restoring</b> Mar. 16		Luke 1999; Allan 2007; Moore and Moore 2013
11. <b>Student presentations</b> Mar. 23		TBD
12. <b>Wrap-up activity &amp; discussion</b> Mar. 30	-Pizza party and final exercise(s) TBD -Course evaluation -Final paper due (Dec. 2)	Dillard 1982

## IV. Course assessment

I have designed the course so that you will be assessed in alignment with our learning outcomes as follows:

Learning outcome (see above)	Teaching and learning activities	Assessment methods
1. <b>Understand</b> and <b>express</b> the significance of metaphors	-Readings, class discussions, and office hours	-Metaphor assignments -Final paper -Media assignment
2. Critically <b>examine</b> the role of key environmental metaphors and <b>evaluate</b> their implications	-Readings, class discussions, and office hours	-Metaphor assignments -Final paper -Media assignment
3. <b>Learn</b> how to juggle to develop further insights	-Readings, practice sessions (in and out of class), and office hours	-Juggling assignment

### 30% Attendance and participation

To encourage active participation in the course, you will receive 1.5% for each class you attend (to a maximum of 15%). You may miss one class without explanation (there are 11 in total), but otherwise must obtain prior permission from me by email and/or present a doctor's note. You will also receive a grade for your overall contribution to in-class discussions and activities (15%), including the quantity and quality of your participation, and evidence that you have come to class prepared to summarize or critically comment upon course readings. In particular, I'll be looking for insightful questions, based on the readings, which help to advance the conversation (or keep it on track). I will evaluate quality more than quantity here, and neither silence nor dominance will lead to the highest marks.

### 24% Metaphor assignments

This is a course that is in part about the importance of language, so writing will be an important part of it. Over the course of the term, you must submit three well-written 4-page argumentative essays, worth 8% each, as follows:

- i) one essay in week 6 ("Life is a Journey"), with a focus on *Siddhartha*; and
- ii) two essays on topics during weeks 7-10 (your choice) [optional: one with a partner]

Each essay must draw on the associated class meeting(s) and cite course readings. Each essay must be submitted by midnight on Wednesday. Further details will be provided.

*\*Please note that I will draw material from your metaphor assignments for weekly in-class writing workshops. These are meant to help improve everyone's writing.\**

### 20% Final paper

This is the final, synthetic paper for the course as a whole. It may focus on either an environmental metaphor of your choice or the metaphors of an area of environmental concern, with appropriate references. It must be **six** pages in length and it will be worth 15%. You will also give a 5min presentation on your topic (followed by 5min Q&A from the class), worth 5%. This paper will be due on December 2; further details will be provided, including a first-cut list of potential topics (first-come, first-served).

**20% Assignment: Learning to juggle as a metaphor for transforming ecosocial systems**  
Your objective is to juggle three balls, and then if possible to learn to “pass” with someone else. But even if you can already juggle, or learn how to do so very quickly, you can just pick a new objective (e.g., more fluidity, tricks, objects, etc.). As we’ll discuss, the key to learning to juggle will be to devote yourself to practicing nearly every day, even if briefly (5-10 min).

Unlike in past years—though subject to revision with class consensus, nobody will evaluate your juggling. Instead, you will provide a grade for yourself at the end of the term based on a rubric we will design together as a class. It will evaluate elements such as adaptability, attitude, effort, and overall learning. Note, though, that I reserve the right to adjust these self-assigned grades if your grade is unrealistic or poorly justified.

**6% Media assignment**  
Once during the term, you must share with the class a sample of current media and provide a 5-minute verbal summary and critical analysis of its metaphors. I will provide examples in the first weeks of class. There will be time for your presentations at the beginning of class in weeks 4, 6-12. Further details will be provided.

## V. Course readings

The assigned readings are mandatory. I will not summarize the readings so please arrive prepared to discuss them.

### Books

You will be required to read the following two books as part of the course:

- *Siddhartha* by Herman Hesse (160 pages, \$7). This is a classic tale of spiritual self-discovery and we will read it together as an example of “life is a journey.”
- *Metaphors for Environmental Sustainability: Redefining our Relationship with Nature* by Brendon Larson (300 pages, \$16.50). This is my recent book on metaphor and sustainability and it will be very helpful in this course because we will read it together and often refer to it.

### Course reader

The following course readings will be available in LEARN. They are generally fairly short and engaging—though sometimes quite challenging. Note that I may assign additional short, timely articles for you to read (e.g., current news).

- Allan, C. 2007. Exploring natural resource management with metaphor analysis. *Society & Natural Resources* 20: 351–362.
- Blackmore, S. 2000. Waking from the meme dream. pp. 112–122 In G. Watson, S. Batchelor, and G. Claxton (eds). *The Psychology of Awakening: Buddhism, Science, and our Day-to-Day Lives*. York Beach, MA: Samuel Weiser.
- Boroditsky, L. 2003. Linguistic relativity pp. 917–922 In L. Nadel. *Encyclopedia of Cognitive Science*. New York: Macmillan.
- Carolan, M. S. 2006. The values and vulnerabilities of metaphors within the environmental sciences. *Society & Natural Resources* 19: 921–930.
- Chandler, A. 1991. On the symbolism of juggling: The moral and aesthetic implications of the mastery of falling objects. *Journal of Popular Culture* 25: 105–123.
- Chawla, S. 1991. Linguistic and philosophical roots of our environmental crisis. *Environmental Ethics* 13: 253–273.
- Davidson, C. 2000. Economic growth and the environment: Alternatives to the limits paradigm. *BioScience* 50: 433–440.

- Dillard, A. 1982. Living like weasels. pp. 29–34 In *Teaching a Stone to Talk: Expeditions and Encounters*. New York: HarperCollins.
- Ende, M. [1973] 1984. The timesaving bank. pp. 55–68 In *Momo*. Toronto: Puffin Books.
- Gelb, M.J. and T. Buzan. 1994. The juggling metaphor. pp. 3–11 In *Lessons from the Art of Juggling: How to Achieve Your Full Potential in Business, Learning, and Life*. New York: Harmony Books.
- Goatly, A. 2007. *Washing the Brain: Metaphor and Hidden Ideology*. Amsterdam: John Benjamins.
- Goodhew, L. and D. Loy. 2002. *Momo*, Dogen, and the commodification of time. *KronoScope* 2: 97–107.
- Gopen, G. D. and J. A. Swan. 1990. The science of scientific writing. Available at <http://www.americanscientist.org/issues/pub/the-science-of-scientific-writing> [accessed 5 Sept. 2013].
- Ison, R. 2010. The juggler: A way to understand systems practice. pp. 57–83 In *Systems Practice: How to Act in a Climate-Change World*. London: Springer and Open University.
- Kabat-Zinn, J. 1994. What is mindfulness and Stopping. pp. 3–7 and 11–13 In *Wherever you Go, There you Are: Mindfulness Meditation in Everyday Life*. New York: Hyperion.
- Ladle, R. J. and L. Gillson. 2009. The (im)balance of nature: A public perception time-lag? *Public Understanding of Science* 18: 229–242.
- Luke, T. 1999. Eco-managerialism: Environmental studies as a power/knowledge formation. pp. 103–120 In F. Fischer and M. A. Hajer (eds.). *Living With Nature: Environmental Politics as Cultural Discourse*. New York: Oxford University Press.
- Mills, W. J. 1982. Metaphorical vision: Changes in Western attitudes to the environment. *Annals of the Association of American Geographers* 72: 237–253.
- Milne, M. J., K. Kearins and S. Walton. 2006. Creating adventures in wonderland: The journey metaphor and environmental sustainability. *Organization* 13: 801–839.
- Moore, K. D. and J. W. Moore. 2013. Ecological restoration and enabling behavior: A new metaphorical lens? *Conservation Letters* 6: 1–5.
- Nordhaus, T., M. Shellenberger and L. Blomqvist. 2012. *The Planetary Boundaries Hypothesis: A Review of the Evidence*. Oakland, CA: Breakthrough Institute.
- Norgaard, R. B. 2010. Ecosystem services: From eye-opening metaphor to complexity blinder. *Ecological Economics* 69: 1219–1227.
- Orwell, G. 1946. Politics and the English language. *Horizon*.
- Princen, T. 2010. Speaking of sustainability: The potential of metaphor. *Sustainability: Science, Practice, & Policy* 6: 60–65.
- Reddy, M. J. 1979. The conduit metaphor: A case of frame conflict in our language about language. pp. 284–310 In A. Ortony (ed.). *Metaphor and Thought*. Cambridge: Cambridge University Press.
- Ross, N., J. Eyles, D. Cole and A. Iannantuono. 1997. The ecosystem health metaphor in science and policy. *Canadian Geographer* 41: 114–127.
- Schultz, B. 2001. Language and the natural environment. pp. 109–114 In A. Fill and P. Mühlhäusler (eds.). *The Ecolinguistics Reader: Language, Ecology and Environment*. New York: Continuum.
- Schön, D. A. 1979. Generative metaphor: A perspective on problem-setting in social policy. pp. 254–283 In A. Ortony (ed.). *Metaphor and Thought*. Cambridge: Cambridge University Press.

## VI. Course policies

This syllabus is a contract between us, so you must abide by the policies and schemes laid out here. If you have any questions or concerns, please speak with me as soon as possible.

### Attendance and preparation

You are required to attend all but one of the class meetings (as reflected by the grading scheme above). Please come to class prepared; in particular, you should have completed the readings, and bring the syllabus, readings and juggling balls to all class meetings.

### Assignment submission policies

Please read rubrics carefully for guidance on preparation and submission of assignments. In general, assignments will be due in a dropbox in LEARN by 11:55pm on the due date. For consistency, assignments should be double-spaced with 12-pt Times new Roman font and 1" margins. Please number pages in the bottom right and put your name in the top right corner of the first page.

I will only accept late assignments if you arrange this with me at least three days in advance of the due date (or if you have a doctor's note or a documented family emergency). Otherwise, your grade for the assignment will be 0.

## Laptop policy

Recent studies have demonstrated that students cannot focus effectively on classroom discussions if others around them are using laptops or electronic devices. This course involves extensive oral and listening participation, rather than note-taking. As such, laptops will not regularly be used during class. If you have a special learning need that requires a laptop, documented through AccessAbility Services (formerly OPD), please come see me and we will come up with a mutually-agreeable solution together.

## VII. Notes for persons with religious beliefs and/or disabilities

The Office for Persons with Disabilities (OPD, <http://www.studentservices.uwaterloo.ca/disabilities>), located in Needles Hall (Room 1132), collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.

Religious Observances: Please let me know at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

## VIII. Plagiarism and academic integrity

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility (see [www.uwaterloo.ca/academicintegrity](http://www.uwaterloo.ca/academicintegrity)). Students who are unsure what constitutes an academic offence are requested to visit the on-line tutorial at <http://www.lib.uwaterloo.ca/ait>.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offence, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy 71, Student Discipline ([www.adm.uwaterloo.ca/infosec/Policies/policy71.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm)). For typical penalties, check Guidelines for Assessment of Penalties ([www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm](http://www.adm.uwaterloo.ca/infosec/guidelines/penaltyguidelines.htm)).

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances ([www.adm.uwaterloo.ca/infosec/Policies/policy70.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm)). When in doubt please contact your Undergraduate Advisor for details.

Appeals: A decision made or penalty imposed under Policy 70 (Student Petitions and Grievances, other than a petition) or Policy 71 (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals ([www.adm.uwaterloo.ca/infosec/Policies/policy72.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm)).

Turnitin: Plagiarism detection software (Turnitin) may be used to screen assignments in this course. This is being done to verify that use of all materials and sources in assignments is documented.