

SUST 434 - Synthesis of Sustainability Perspectives and Innovations - Fall 2015

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Instructor:

Dr. Bruce T. Milne, Professor of Biology & Director, UNM Sustainability Studies Program

Office: Castetter Hall, room 1582

Email: bmilne@sevilleta.unm.edu

Office Hours: Tuesday 9:30 - 10:00 and Friday 11:00 – 11:30,
or by appointment at our convenience

Class sessions: Tuesday, Thursday 12:30-1:45 p.m. Mitchell Hall, Room 105

Books:

- 1) Diamandis, P. and S. Kotler. 2012. Abundance: The Future Is Better Than You Think. Free Press. ISBN 9781451614213
- 2) Toyama, K. 2015. Geek Heresy: Rescuing Social Change from the Cult of Technology. Public Affairs, New York. ISBN 978-1-61039-528-1

Course description:

Presents frameworks for complex and creative analysis, including systems thinking and synergistic integration of the three pillars of sustainability: environment, equity, economy. Examines innovative local and international case studies in environment, business, policy, and community development. Prerequisites: SUST 334

Goals, purposes, and expectations: This course is suited for students interested in the theoretical and practical aspects of community development, local economies, resource conservation, community activism, and environmental protection.

This course provides the opportunity to integrate experiences and knowledge gathered in Introduction to Sustainability and Environment (SUST 134), Sustainability Practicum (SUST 334), and the electives students have taken toward the minor degree in Sustainability Studies. Students will engage in more complex levels of understanding the challenges of sustainability as they prepare for the capstone project ahead (SUST 499). Most students gravitate naturally to one or two of the three pillars of sustainability (environmental protection, social justice, and economic vitality). This course examines all pillars and the interactions among them. We will study frameworks for making meaning from complex situations and integrated design, including systems thinking and interdisciplinary philosophical underpinnings of sustainability. This will enable us to acquire a broader lens through which to design synergistic applications of sustainability's three pillars.

We engage in a caring, creative learning experience with responsible students and thereby gain perspectives that empower us all as agents of sustainability. From Steve Covey's *Seven Habits of Highly Effective People* we favor an outcome that is "win/win". Some languages have no words for "teaching" but over 30 words for "learning". Indeed we can only learn; learning is the basis of personal development and enrichment.

Plagiarism: The Faculty Handbook, policy D100, affords instructors the authority to respond to plagiarism by granting a grade of "...F' in the course and the involuntary withdrawal of the student from the class..." Avoid committing plagiarism by making all your work your own. Do not cut and paste from web sites, Dropbox, or articles. Brief, direct quotes are allowed but must be documented as such. *Always put quoted text within quotation marks or in a smaller italics font, with complete attribution to the source.* The only exception in this course is for the biographical sketch assignment where you actually need to cut and paste large amounts of text from the subjects' writings in order to create word clouds.

Course design:

We focus on scholarship and theory with which to guide effective solutions for sustainability.

Grading	%	Notes
Midterm	10	October 1
Final	15	Thursday, Dec. 10, 10:00 a.m. – noon.
<u>Looking within:</u>		
My Worldview	10	Who are you?
Technology self-audit	5	Multi-generational shifts in technology.
Thirty days of The Method	10	Learn, practice for 30 days, and teach two new people.
<u>Looking beyond:</u>		
Dr. Vandana Shiva Event	10	Make this campus event a success and a prelude to abundance.
Essay: Proper Roles of Technology	15	Raise up NM; 10 pages, double spaced, with 10+ citations from scholarly literature.
<u>Portfolio:</u>		
Panel participation	5	Join a topical panel to share insights from one of your assignments.
Experience Diaries	<u>20</u>	There will be approximately 20 assignments including the
	100	Experiential Diaries. Please complete these
		to prepare for class. Doing these assignments is proven to raise exam grades.

Keep track of your assignments and due dates with this handy [assignment checklist](#).

SUST 434 - Schedule Fall 2015

Notes: 1) Where the column "Due for this class" lists "**Read...**", please complete and print the "[Experience Diary](#)" to hand in for credit.

Where it lists "**RD ...**", please complete the "[Read Diary](#)" to hand in for credit.

2) Assigned chapters from *Abundance* are listed, e.g., "A 1-3" means *Abundance*, chapters 1-3.

Assigned chapters from *Geek Heresy* are listed, e.g., "GH 1-3".

Date	Topics	Due for this class:	Resources	Activities
Aug 18	Introduction		Experience Diary	Syllabus; Skills inventory
20	Worldviews	Read Bijker (2001) and fill out the Experience Diary to bring to class.	Reading as a scholar ; SSP Writing Guide	Skills summary; Discuss Bijker (2001); My Worldview assignment
25	Worldviews	Read Fudpucker (2001)		Discuss Fudpucker (2001); Panel signups; Grading criteria ; Kickoff Shiva raffle activity.
27	Worldviews			Worldview exploration Looking at status quo in NM
Sept 1	State of the World and NM	My Worldview		Presentation Worldview Panel;

				Technology Audit assignment; Table/Figure Exercise
3	The Method		Guidebook: Mindfulness, Intention, and Gratitude	Start your 30 days of practice. The Method Assignment
8	Our greatest challenge; Technology Audit	Read A 1 <i>Technology Audit due</i>	Seppelt et al. (2014) peak resource use	Discuss A 1 Technology Audit Panel;
10	Vision for our future	Read A 2-3		Discuss A 2-3 Roles and Responsibilities of Technology Assignment
15	Optimism and Inevitability	Read A 4-6	Singularity RoboBees Jevons' paradox	Discuss A 4-6,
17	Two Billion Customers Served	Read A 7-9, 13	Robotics	Discuss A 7-9, 13
22	The forces of abundance	Read A 10-12		Read A 10-12
24	Peak of the Pyramid	Read A 14-17	The “Twenty- fivers” generation	Discuss A 14-17
29	Future Trends	Read A 18-19		Discuss A 18-19; Review for exam;

				Collect raffle packets
Oct 1	Midterm Exam	Midterm Exam		
6	We are seeds of abundance and creativity	Read Shiva (1989)		Discuss Shiva (1989)
8	Fall Break			
13	Dr. Vandana Shiva Event			The Method's first 30 days have passed. Event tonight, SUB ballroom 5:30 – 9; food, free.
15		The Method; Gratitude jars		The Method Panel
20	Conflicting results; Law of Amplification	Read GH 1-2		Discuss GH 1-2
22	Misguided beliefs	Read GH 3		Discuss GH 3
27	Packaged innovation	Read GH 4		Discuss GH 4
29	Biases of Do-gooding	Read GH 5		Discuss GH 5
Nov 3	Biomimicry	RD Tero et al. (2010) with the Reading Diary filled out	Reading Diary Entry Form	Presentation, Video

5	Amplifying People	Read GH 6		Discuss GH 6 Literature as Time Machine
10	Human development	Read GH 7 RD Bettencourt et al. (2007)	Brown et al. (2011) , Scheffer et al. (2012) ; Barnosky et al. (2012)	Discuss GH 7
12	Intrinsic Motivation;	Read GH 8		Discuss GH 8
17	Mass intrinsic growth;	Read GH 9		Discuss GH 9 Optimization;
19	Mentorship	Read GH 10 <i>Roles of Technology</i>		Discuss GH 10 Technology Roles & Responsibilities Panel
24	Foodshed Development	Read Kloppenburger et al. (1996) ;	Peters et al. (2008) ;	
26	Thanksgiving			
Dec 1	Benefits of Biodiversity	RD Worm et al. (2006) ;	Naeem et al. (2012)	
3	Hopeful Views	Read Wallace	Dreaming NM	Discuss Wallace (2006);

	for the Future	(2006)		Envisioning Our Scenarios for 2030
8	Evaluation & review	Bring questions to ask about the exam	Trajectory of a Graduate Student	Discussion: Career Paths for This Generation. Review for exam
10	Final Exam	10:00 a.m. – noon		