International Agroecology PSS 295

INSTRUCTOR:

V. Ernesto Méndez Professor of Agroecology Agroecology & Livelihoods Collaborative (ALC)

https://www.uvm.edu/agroecology/ University of Vermont

Office: Jeffords 225; Phone: 802-656-2924 Email: Ernesto.mendez@uvm.edu

CLASS MEETING TIMES AND LOCATION

Online: July 17 to July 30

Face to Face: July 31 to August 1, Location TBD

ONLINE or FACE-TO-FACE OFFICE HOURS:

- Weekly (Tuesday, Wednesday & Thursday, 11-12) by appointment.
- Face to Face at Jeffords 225, by appointment.
- Students will be able to either meet in person, or live chat with instructor during these time periods.

COURSE DESCRIPTION:

This hybrid, 4-week course presents an in-depth overview of research and applications in the field of agroecology, with a focus on resilience. The course seeks to provide students with both conceptual and practical content. We cover the evolution of the field of agroecology, from its origins to the present, as it gains increasing recognition in scientific, policy, social movement and farming spaces. Students will engage in some of the debates agroecologists are now facing, as they grapple with maintaining the core characteristics of the field as it is increasingly applied by a wide diversity of users. A special emphasis is placed in discussing the different expressions of agroecology as a science, a social movement and a practice. This embodies thinking of agroecology as transdisciplinary, integrating different knowledge systems in a search for solutions to the current challenges of our agrifood systems. In addition, we will explore the use of participatory action research (PAR), as an essential approach to agroecological research and practice. As part of the International Agroecology Shortcourse series that have been running since 1999, this year's course has a special emphasis on understanding and applying resilience, from an agroecological perspective. We will cover international and domestic geographic perspectives, and examine, more in-depth, resilience issues in 3 local Vermont farms. The face to face part of the course integrates several invited instructors, including Stephen R. Gliessman, one of the pioneers of the field of agroecology, and Roseann Cohen, Executive Director of the Community Agroecology Network (CAN).

READING MATERIALS

Required*

Méndez, V.E., C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) (2016). Agroecology: a transdisciplinary, participatory and action-oriented approach. Advances in Agroecology Series. CRC Press/Taylor and Francis.

*Other readings (e.g. journal articles, news excerpts, fact sheets, etc.) will be provided.

LEARNING OBJECTIVES...By the end of this course, students will be able to:

- 1. Describe the state and evolution of the field of agroecology and engage in the debate on agroecology's dimensions as a science, a social movement and a practice;
- 2. Apply agroecological principles to resilience thinking and practice;
- 3. Understand opportunities and challenges of applying agroecology and resilience thinking in 3 local Vermont farms.
- 4. Engage in active peer to peer learning with classmates and the diversity of professionals attending the face to face portion of the course.

COURSE STRUCTURE

Module 1 (Week 1): Agroecological Foundations

Learning Goals:

- 1. Explore the origins and evolution of agroecology, including its transdisciplinary and ecological foundations.
- 2. Understand agroecological perspectives, also known as agroecologies and identify key examples.

Assignments:

- 1. Online discussion forums, Tuesday, Wednesday and Thursday, based on readings and/or other course material. This includes 3 individual posts, and 3 replies to peers' posts.
- 2. Participate in a live group chat.
- 3. View and comment video.
- 4. View video lecture.
- Module Essay. Students will choose a topic of interest and develop a reflective essay that integrates the learning accomplished through the week (3-5 pages).
 Specific guidance and instructions will be provided.

Readings:

Méndez, V.E., C.M. Bacon and R. Cohen (2016) *Introduction: Agroecology as a transdisciplinary, participatory and action-oriented approach*. pp. 1-22. <u>In</u> V.E. Méndez, C.M. Bacon, R. Cohen and S.R. Gliessman (Eds.) Agroecology: a

- transdisciplinary, participatory and action-oriented approach. CRC Press/Taylor and Francis
- Méndez, V.E., M. Caswell, S.R. Gliessman and R. Cohen (2017) *Integrating Agroecology* and *Participatory Action Research (PAR): Lessons from Central America*. Sustainability 9(5): 705. doi: 10.3390/su9050705
- Wezel, A., S. Bellon, T. Dore, C. Francis, D. Vallod and C. David (2009) *Agroecology as a science, a movement and a practice. A review*. Agronomy for Sustainable Development 29(4): 503-515. doi: 10.1051/agro/2009004

Module 2 (Week 2): Agroecology and Resilience

Learning Goals:

- 1. Understand the diversity of conceptualizations and applications of resilience.
- 2. Make conceptual and applied connections between agroecology and resilience.
- 3. Identify ways in which agroecology can serve as a tool for agricultural and livelihood resiliency.
- 4. More specifically, examine the question: how can agroecology serve as an appropriate response to build resiliency in the face of climate change?

Assignments:

- 1. Online discussion forums, Tuesday, Wednesday and Thursday, based on readings and/or other course material. This includes 3 individual posts, and 3 replies to peers' posts.
- 2. Participate in a live group chat.
- 3. View and comment on video.
- 4. View video lecture.
- 5. Participate in a live group chat.
- 6. *Module Essay*. Students will choose a topic of interest and develop a reflective essay that integrates the learning accomplished through the week (3-5 pages). Specific guidance and instructions will be provided.

Readings:

- Altieri, M., C. Nicholls, A. Henao and M. Lana (2015) Agroecology and the design of climate change-resilient farming systems. Agronomy for Sustainable Development 35(3): 869-890. doi: 10.1007/s13593-015-0285-2
- Béné, C., R.M. Al-Hassan, O. Amarasinghe, P. Fong, J. Ocran, E. Onumah, R. Ratuniata, T.V. Tuyen, J.A. McGregor and D.J. Mills (2016) Is resilience socially constructed?
 Empirical evidence from Fiji, Ghana, Sri Lanka, and Vietnam. Global Environmental Change 38: 153-170. doi: http://dx.doi.org/10.1016/j.gloenvcha.2016.03.005
- Caswell, M., V.E. Méndez, J. Hayden, J. Anderzén, P. Merritt, A. Cruz, V. Izzo, S. Castro, J. Wiegel, A. Ospina and M. Fernandez (2016) Assessing resilience in coffee-dependent communities of Honduras, Nicaragua and Haiti. . ARLG/LWR Research Brief #5. Agroecology and Rural Livelihoods Group (ARLG), University of Vermont & Lutheran World Relief (LWR).

Module 3 (Weeks 3 and 4): Face to Face Week

Learning Goals:

- 1. Expand and deepen the materal learned in the online portion by engaging with new instructors and pedagogical approaches.
- 2. Apply some of the conceptual approaches on agroecology and resilience, learned in the first 2 weeks, in 3 real-farm settings.
- 3. Make conceptual and applied connections between agroecology and resilience.
- 4. Engage in active peer to peer learning with classmates and the diversity of professionals attending the face to face portion of the course.

Assignments:

- 1. Participation in face to face activities.
- 2. *Module Essay*. Reflective essay that integrates the learning accomplished through weeks 3 and 4 (3-5 pages), with an emphasis on integrating online learning, face to face activities, and applied farm experience. Specific guidance and instructions will be provided.

STUDENT ASSESSMENTS

1. Online Discussion

The discussion board will engage students in written dialogue about the readings and other materials. Prompts will be provided for each of the week's discussion topics. Students will use the online, Blackboard Discussion Board to share their responses to the prompts and each other's commentary, as follows: 1) a response to at least one of the prompts provided by the instructor for each reading [5 points]; and 2) an additional posting responding or commenting on another student's comment [5 points]. Students will do 3 responses and 3 replies per week. Comments and responses need to be done in a professional and respectful manner. We will not tolerate the use of rude language or personal attacks on classmates. Students who fail to follow this rule will lose the remaining commentary and response points for the semester

2. Module Essays

After completion of each module, students will be required to prepare a reflective essay on the content of the module that also integrates their previous knowledge and experience. Guidance will be provided on how to work on these essays.

GRADING SCHEME

	Total	120 naints			
	(includes participation, quality of engagement, attendance, enthusiasm, etc.)				
4.	Overall course participation	20 points			
3.	Reflective Essays (3 x 20 points)	60 points			
2.	Video commentary (2 x 5) 10 points				
1.	Discussion board commentary & reply (15 pts X 2 weeks)	30 points			
The cou	rrse evaluation will be based on a total of 200 points, separated int	to the following:			

Total 120 points

FACE TO FACE TENTATIVE SCHEDULE

SHORTCOURSE SCHEDULE 2017						
Date	31-Jul Monday DAY 1:	1-Aug Tuesday DAY 2 :	Week 1 2-Aug Wednesday DAY 3:	3-Aug Thursday DAY 4:	4-Aug Friday DAY 5:	5-Aug Saturday DAY 6:
Topic	Arrival/Introductions, History/Evolution of Agroecology	Ecological foundations	Resiliency: Droughts, Floods, Cultural Control (Varieties, Planting, etc.)	Defining Resiliency	Measuring Resiliency	Approaches: PAR (at Bread and Butter farm)
8:00	BREAKFAST					
Morning	HISTORY OF AGROECOLOGY	Defining Resilience	Rachel Bezner Kerr: Food Security - Malawi Example	Resiliency Measures	Cultural contexts: Racism/Globalization and Resiliency	Introduction to PAR/History
1:00	LUNCH					
Afternoon	AGROECOLOGIES	Catamount Farm: ECOLOGICAL FOUNDATIONS	Farm visit: Digger's Mirth	Farm visit: John Hayden (Pollination and Ecosystem Services)	Livelihoods and CCA frameworks	Surveys and tools
6:00	DINNER					
	·					

Week 2						
Date	Sunday 6-Aug DAY 7:	Monday 7-Aug DAY 8 :	Tuesday 8-Aug DAY 9:	Wednesday 9-Aug DAY 10:	Thursday 10-Aug DAY 11:	Friday 11-Aug
Topic	Day Off	Approaches: Transdisciplinary	Shortcourse Practicum	Shortcourse Practicum: Analysis	Graduation/Final Reflection	Departure
8:00	BREAKFAST					
Morning		Transdisciplinary Research Methods	Workshare	Synthesis and assesment for last project details	Presentations/Reflections	
1:00	LUNCH					
Afternoon		Planning of possible research focus with team	Begin Project on Farm	Finish up resilience project on farm	Final Reflection Exercise	
6:00	DINNER					
					Bread and Butter - Celebration Burger Night	

	Farm Location	
Diggers Mirth		
The Farm Betwee		
	Bread and Butter	
	All Farms	

ACADEMIC HONESTY

Academic honesty is expected of all students. The University of Vermont has a very strict policy concerning academic honesty and plagiarism. Please see the statement on academic honesty http://www.uvm.edu/~uvmppg/ppg/student/acadintegrity.pdf.

PLAGIARISM

Plagiarism constitutes a violation of Academic Honesty and warrants failure on an assignment and/or failure in the course. Plagiarism of ANY sort - e.g., copying part or all of a fellow student's report, copying from original references, texts, or websites - will NOT be tolerated. The consequences of plagiarism or cheating range from a score of zero on the assignment or exam, to filing a complaint with the University's Coordinator for Academic Honesty which can result in expulsion from UVM.

COURSE CONTENT IS THE PROPERTY OF THE INSTRUCTOR

Consistent with the University's policy on intellectual property rights, all teaching and curricular materials (including but not limited to classroom lectures, class notes, exams, handouts, and presentations) are the property of the instructor. Therefore, electronic recording and/or transmission of classes or class notes is prohibited without the express written permission of the instructor. Such permission is to be considered unique to the needs of an individual student (e.g. ADA compliance), and not a license for permanent retention or electronic dissemination to others. For more information, please see the UVM policy on Intellectual Property, sections 2.1.3 and 2.4.1 C