

# 18<sup>th</sup> International Agroecology Shortcourse

## Intensive residential program at UVM

### July 31st - August 10th, 2017

#### **Hosted by**

The Agroecology and Livelihoods Collaborative (ALC)

#### **Description**

This course is a 11-day intensive experience in which participants learn, live, collaborate and work each day from breakfast through evening programming. A dynamic and participatory course design balances applied and conceptual work through a transdisciplinary, participatory action research (PAR) approach. Learning modules range from basic agroecological principles to resilience frameworks, and food system transformation. Presentations and facilitated discussions by the core teaching team are complemented by invited specialists, group discussions on assigned readings, hands-on field activities, individual and group presentations, and field trips to local farms and training programs.

#### **Learning Objectives**

*By the end of (or during) this course, participants will:*

1. Exhibit a thorough understanding of the history and evolution of agroecology
2. Evaluate different agroecological approaches as they apply to contemporary environmental and agrifood issues
3. Examine the role of agroecology in building resilient agrifood systems
4. Develop skills to effectively execute transdisciplinary research using a participatory action research (PAR) approach.

### **Course Information**

#### **Core Instructors**

V. Ernesto Méndez, Ph.D. Associate Professor of Agroecology and Environmental Studies at UVM

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Victor Izzo, Ph.D. Lecturing Professor of Agroecology and Biology at UVM

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Stephen Gliessman, Ph.D. Professor Emeritus of Agroecology, Department of Environmental Studies at UCSC

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Roseann Cohen, Ph.D. Executive Director of the Community Agroecology Network

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#### **Course Coordinator**

Claire Wiggin, Research Assistant, Agroecology and Livelihood Collaborative

Email: [Claire.wiggin@uvm.edu](mailto:Claire.wiggin@uvm.edu)

#### **Location**

Classroom portions of this course will begin in 110 Jeffords Hall, at UVM. Much of the course content will be in the field. Departure for field trips will be coordinated from the front doors of Jeffords Hall

## Course 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:
<b>Topic</b>	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)
<b>8:00</b>	BREAKFAST						
<b>Morning</b>	HISTORY OF AGROECOLOGY	Defining Resilience	Rachel Bezner Kerr: Food Security - Malawi Example		Resiliency Measures	Cultural contexts: Racism/Globalization and Resiliency	Introduction to PAR/History
<b>1:00</b>	LUNCH						
<b>Afternoon</b>	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	
<b>6:00</b>	DINNER						

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

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

# Curriculum

## **Module 1. Agroecology**

*What is agroecology and how has it evolved?*

Students will learn how to understand and describe agricultural landscapes as dynamic agroecosystems. Starting with the ecological foundations of agroecology, the principles of agroecology are presented at multiple scales to transform the food system for sustainability and resilience in human and environmental health.

### **Students gain these tools/frameworks:**

- Agroecological lens
- Agroecology principles
- Multigender lens
- Gliessman's levels of farm conversion

## **Module 2. Resilience**

*How is resilience applied and where do we fit?*

Students explore the diverse conceptualizations of resilience theories and then evaluate the nuanced applications of resilience drivers and resilience measurements. Content is focused on drawing out the experiences of students and presenting international case studies. Emphasis is placed on how sociocultural context influences farmers' assets and land management decisions.

### **Students gain these tools/frameworks:**

- Vulnerability assessments
- Resiliencies
- Resilience Indicators

## **Module 3. Approaches and Techniques**

Case studies demonstrate how transdisciplinary and participatory approaches have been applied in agroecology. Students gain an understanding of the principles, benefits and challenges of participatory action research. Transdisciplinary research is presented as the best way to understand agroecological challenges embedded within social-ecological systems.

### **Students gain these tools/frameworks:**

- PAR
- Transdisciplinary research design
- ODK

## **Module 4. Synthesis:**

Students work in groups to synthesize concepts and skills gained in the course and apply them on a local farm for their final project, described in more detail below. The course culminates with presentations by each group, personal reflections, group discussion and some final content on scaling up to the food system.

## Coursework

### **Readings**

Readings and online discussion are required for students enrolled for credit, and strongly encouraged for non-credit students.

### **Homework**

Short homework assignments are expected during week 1. Students should come to class prepared to share their perspective on assignments. This will enrich and inform conversations with the group.

### **Daily Recaps**

Each day of the course will begin with a recall and summary of experiences from the day prior. Students are expected to facilitate at least one daily recap.

### **Final Group Project: Farm Resilience Assessment**

Students work in groups to synthesize information at the intersection of agroecology and resilience using a local farm to ground their analysis. Each group will apply tools and frameworks provided in the course lecture and activities to generate a resilience assessment for their farm. Each group's resilience assessment should include a description of:

#### **Part 1: Vulnerability complex.**

Groups will identify and summarize the vulnerability complex of the farm which will inform their resilience assessment. This should include major shocks and stressors, climactic and other. (Link to NE Climate Hub vulnerability assessment summary). This will be concise, but students should demonstrate how this draws upon their synthesis of resilience theories during the course.

#### **Part 2: Indicator Selection.**

Students will use ALC's research into resilience indicators (LWR project report) as a starting point, and will be encouraged to invite their farm partner to help select indicators of resilience.

#### **Part 3: Data Collection**

Groups will use transdisciplinary methods to do data collection, including at least:

- interviews with farmer(s)
- Vermont ANR Natural Resource Atlas (or other analog service)
- Participant Observation
- Farm records

#### **Part 4: Resilience Assessment Matrix**

Using the principles and indicators introduced during week 1, groups will select a list of principles and indicators to describe their farm's current resilience capacity. This should be based on the research they were able to do during the course and reflect input from the farmer. Groups will also suggest potential farm adaptations/transformations which could increase resiliency, based on their research. Resilience assessments will be reported using this matrix, adapted from the Caswell and Mendez LWR report. (Groups could alternatively present this information through the Community Capitals Framework or Sustainable Livelihoods Approach.)

**Part 5: Implications at the Food System Scale**

Each group should describe their farm within Gliessman's levels of conversion and consider how their farm scale assessment is reflected at the community and international food system scales. That could include impacts, vulnerabilities and implications of any kind which draws upon the experience and interest of group members. (This could be an activity in the last days of class, rather than an assignment.)

**Part 6: Individual PAR reflections**

Student will turn in a written reflection on their experience in the group project which includes: at least 3 PAR principles as well as personal challenges, strengths, process, breakthrough moments, and group dynamics.

The course culminates in group presentations of these resilience assessments and a discussion of implications at multiple food system scales.

**Optional Activities**

Community Share Space: This is a time when participants can talk about their own experiences and work that may be of interest to the group, or present an idea they would like feedback on from the course community. Mealtime during the course is a time to relax and network with students, participants and teachers, but some meals will include more structured opportunities for this sharing which we will call "Community Share Space".