

ECL 290 CRN 20570 Ecology and Agriculture

Winter Quarter 2017
2 Units, Wednesdays 1-3pm, Briggs hall 360

Instructors: Amélie Gaudin/ Neal M. Williams, Plant Sciences/ Entomology-Nematology

Course description: This seminar course will examine how ecological principles and linkages across scales are expressed in agroecosystems and explore how ecological approaches can be applied to the development of sustainable management for agriculture. We will dissect processes at the organism (autoecology/crop ecophysiology), community, ecosystem, and landscape level in agricultural settings, and explore how stakeholder involvement and decisions shape ecological processes and the environmental and productivity outcome of agriculture. The class will be organized as student-lead paper discussion and critical thinking around study questions.

As a 290, each participating GGE student will be required to give a 20 min presentation during the quarter. Topics will be matched to those on the weekly schedule below.

Tentative Schedule:

Week	Date	Day	Subject
1	Jan. 11	W	Agricultural Ecology: Scales and Scope
2	Jan. 18	W	<i>Autecology</i> : Growth Patterns, Resource Use, and Limiting Factors
AG 3	Jan. 25	W	<i>Community Ecology</i> : Examples of Biotic Interactions in Agriculture
NM 4	Feb. 1		<i>Community Ecology II</i> : Examples of Biotic Interactions in Agriculture
AG 5	Feb. 8	W	<i>Ecosystems Ecology</i> : Defining Agroecosystems and Their Functioning
AG 6	Feb. 15	W	<i>Landscape Ecology</i> : Interfaces Between Natural and Agricultural Systems
NW 7	Feb. 22	W	<i>Land Use Change</i> :
AG 8	Mar. 1	W	<i>Agrobiodiversity</i> : Biodiversity-Planned systems and Diversified farming
AG 9	Mar. 8	W	<i>Agrobiodiversity</i> : Biodiversity Use and Conservation
NW 10	Mar. 15	W	<i>Linking Agricultural Ecology with Policy</i> : Climate Change as an example
Guest			