Agroecology
(Previously 11:776:307 Topics in Agroecology)
(3.0 credits)

Normally Offered: Fall every year. By Dr. Mark Robson.

Pre-requisites and other registration restrictions:
Open to JUNIORS AND SENIORS only

Format: One 3-hour meeting

Description:
This course is designed to introduce various topics of Agroecology including traditional and organic farming, plant and animal production, energy, pest management, specialized and controlled environment agriculture and sustainable practices. This is a colloquium and class size is small so we will try and have an interactive class environment.

Learning Goals:
• Be able to conduct a student discussion on the topics presented using information from the readings, education, and personal experience.
• Start to recognize one’s own values in regards to food production, trade and consumption and learn how to display those values in one’s consumption habits
• Be able to defend one’s values using information learned in this class and/or previous experience
• Learn more about Agroecology and the problems the world is facing and will encounter in the future in regards to food production, trade, and consumption
• Develop a definition for sustainability as it relates to agriculture.

Measures of Assessment:
• Attendance
• Participation in discussions
• Presentation of group project
• Critical paper on topic in Agroecology
Course Website:
http://www-rci.rutgers.edu/~insects/robson.htm

Topics:

• Intro to Agroecology
• Readings:
  • Sustainable Agriculture: An Introduction
  • What is Sustainable Agriculture?

• Global Agroecology
• DVD: Silent Spring
• Readings:
  o Global Food Production Systems
  o The Global Food System: A Research Agenda

• Faith Basis of Sustainability
• DVD: Food, Inc.
• Readings:
  o Agricultural Sustainability and Intensive Production Practices
  o Agricultural Sustainability: Concepts, Principles and Evidence
  o Environmental Issues in Animals Agriculture

• NYC field trip to:
  o Riverpark Farm http://www.riverparkfarm.com/Riverparkfarm/farm.htm
  o NYC Green Market Union Square http://www.grownyc.org/unionsquaregreenmarket

• Non-Apis Pollinators and Pollination Ecology
• An Assessment of Non-Apis Bees as Fruit and Vegetable Crop Pollinators in Southwest Virginia
• Bee Behavior and Pollination Ecology
• Pollinator-Dependent Crops: An Increasingly Risky Business
• Native Bees Provide Insurance Against Ongoing Honey Bee Losses

• Solar Options in Agriculture
• Combining Solar Photovoltaic Panels and Food Crops for Optimizing Land Use

• Biofuels and alternative energy
• New Jersey’s Energy Master Plan

• CSA and Food Systems; Biotech Plants and Animals
• DVD: Bad Seed
• Readings:
Community Supported Agriculture: Can it become the Basis for a New Economy?
Cooperatives in a Changing Global Food System

- Sustainable and Organic Agriculture and Marketing
- The Increasing Role of Direct Marketing and Farmer Markets for Western US Producers
- Principles of Organic Agriculture

**Required and Recommended Course materials:**
Readings will be provided.

**Policies for Exams, Assignments, Attendance, and Grading**

- **Attendance** 20%
  
  Attendance to class is crucial to success in this course. Topics and readings will be discussed during lecture.

- **Participation** 20%
  
  Discussion is an important part of this course. Readings will help the class introduce the class to topics and talk about their ideas and view about issues in Agroecology.

- **Presentations** 30%
  
  Students will divide up into teams and develop a class project. Details presented on September 17 and we will make those presentations the last two class meetings.

- **Critical Paper:** 30%
  
  Students are required to write a report about various aspects of Agroecology, the paper should be 6 to 8 pages in length plus references, double spaced 10 point type. The paper is due the last day of class.

**Other Information:**

One Saturday field trip scheduled.