



Expected Course Offerings for Minor Students & Non-Majors, Spring 2019

RS 1110: Introduction to Regenerative Studies. 3 Units

Face to Face M 2:30 PM - 5:15 PM, Room 209-212. Douglas Kent, Instructor (Class Nbr 31573)

Online - Andrea Arias Martinez, Instructor (Class Nbr 31574)

A survey of interactions between physical, biological and social systems essential for human life, including food, water, energy, shelter and waste management. Development of conscious understanding of the relationship between people and their social and physical environments, through examination of systems that sustain future generations through the regeneration of critical resources and ecosystem processes. **Course fulfills GE Area E Requirement.**

RS 3010: Life Support Processes. 3 units.

Online - Douglas Kent, Instructor (Class Nbr 31575)

Understanding the complex physical and biological systems, and the social context within which they occur, which provide resources and processes to meet the basic needs of human communities. These systems and processes provide water, food, energy, shelter, atmosphere, and a functional landscape. **Meets General Education, Area B5, Science and Technology Synthesis Requirement.**

RS 3020: Global Regenerative Systems. 3 units. (Class Nbr 30002)

T/Th 4:00 PM – 5:15 PM, Room 162-1002. Dr. Jerry Mitchell, Instructor

Study of the institutional factors affecting the implementation of regenerative practices needed to meet the challenges of limited resources. Investigations of the global effects of human activities in the pursuit of food, water, energy, shelter, and waste sinks. **Meets General Education Area D4, Social Science Synthesis Requirement.**

RS 3030: Organization for Regenerative Practices. 3 units. (Class Nbr 30252)

W/F 4:00 PM – 5:15 PM, Room 209-212. Beth Anne Morrison, Instructor

Investigation of sustainable organizing processes for regenerative practices. The cultural and institutional organizing processes are examined at the global, multi-national, national, regional, local, family, and individual levels. These processes are analyzed in relation to population, food production, resource and waste management, energy systems and shelter. **Meets General Education Area C4, Humanities, or D4, Social Science Synthesis Requirement.**

RS 4140/4140L: Current Applications in Regenerative Studies: Edible Landscapes and Cuisine: Indigeneity, (De) colonization, and Culinary Ethnobotany. 2 units and 1 unit. (Class Nbrs 30253/30267) T 10:00 - 11:50 AM and T 1:00 PM – 3:50 PM. Room 209-212.

Claudia Serrato, Instructor

This course provides a space to engage the sensory body in cultivating knowledge production and application of this knowledge within ecological regenerative relationships and systems. Indigenous ways of knowing (traditional ecological knowledge) and Indigenous eco-feminisms provide critical teachings, lessons and earth-based knowledge towards a de-colonial praxis of regeneration. This student-centered community will embody these teachings and apply them in identifying plants in their life cycles and life histories, identifying their edible parts, predicting their ecological flavor profiles, tasting the plants, identifying its culinary uses and preparing some edible landscape food tastings. This practice of culinary ethnobotany through active student centered engagement will too include talking circles, research, plant observations, and foraging.

RS 4140S/4140LS: Current Applications in Regenerative Studies: Aquaponics Engineering. 2 units and 1 unit. (Class Nbrs 35387/35388)

T 1:00 - 3:50 PM, and Th 1:00 PM - 2:50 PM, Room 209-218. Maryam Shafahi, Instructor

Aquaponics is an environmentally friendly food production system that combines aquaculture and hydroponics, growing fish and plants together. In this mutually beneficial cycle, nutrient waste from the fish, are utilized to fertilize plants and the plants bed functions as a bio-filter. The course includes the design aspects, water quality, fish and plant health management, and economic analysis of aquaponics.

RS 4200/4200L: Current Applications in Regenerative Studies: Watershed Restoration. 2 units and 1 unit. (Class Nbrs 30256/30257)

F 9:00 AM – 10:50 AM and 12:00 PM - 2:50 PM, Room 209-212. Dr. Jeff Marshall, Instructor

Watershed restoration strategies integrate basic concepts of hydrology, sedimentology, geomorphology, and ecology in an effort to reverse degraded water quality and watershed function. This course explores the physical processes of watersheds and stream corridors through lectures, field trips and case study discussions. Students will engage in hands-on field work and address current watershed problems at local field sites.

RS 4300/4300L: Current Applications in Regenerative Studies: Solar Energy Systems. 2 units and 1 unit. (Class Nbrs 30254/30255)

M 11:00 AM – 12:50 PM and W 12:00 - 2:50 PM Room 209-212. Don Serio, Instructor

Analysis of solar technologies applied to heat, power generation and associated loss mechanisms. Examines fundamental theories that form the basis of light from the sun, and how this energy stream is appropriated for human usage. The lab component utilizes projects that must be designed and built by the student to test theory. Recommended prerequisite: Beginning trigonometry.

RS 4500: Sustainable Communities. 3 units.

Face to Face - W 5:30 - 8:15 PM, Room 209-212. Timothy Kohut, Instructor (Class Nbr 30266)

Online – Timothy Kohut, Instructor (Class Nbr 31589)

Historical survey and cross cultural study of sustainable communities in relation to their particular built form. Examination and analysis of intentional communities as models of traditional and/or alternative patterns. Exploration of legal and economic organization of land holding or facilitating experimentation. 4 lecture discussions. Prerequisites: One GE course from each of the following sub-areas: A1, A2, A3, and C1, C2, C3 and D1, D2, D3. **Meets General Education Area C4 Humanities or D4, Social Science Synthesis.**

RS 4990: Sustainable Economics. 3 units. (Class Nbr 33589)

TH 1 – 3:45 PM, Room 209-212. Kevin Grell, Instructor

A vibrant branch of the social sciences, sustainability economics deals with balancing environmental, societal, and economics interests. This course provides a thorough introduction to the subject matter while strengthening the student's understanding of (and appreciation for) the reality that any sustainability professional encounters. We will introduce and learn how to apply various concepts, tools and methods from microeconomics (e.g. cost-benefit analysis, markets, quality/performance measurements) in the analysis of especially environmental challenges and their potential solutions. Format: 4-hour combination of lectures, student presentations, discussions, and analytical group work.

RS 4990: Communications for Environmental Professionals. 3 units. (Class Nbr 33587)

M 5:30 – 8:15 PM, Room 209-212, Douglas Kent, Instructor

Creating a healthier, more resilient future requires effective communication. Whether trying to change behavior, selling a product, relaying complex ideas or simply educating the public, this class will give you the essential skills to make an impact. You will be studying writing (brief proposals, press releases and white papers), public speaking, interpersonal communication (negotiations, conflict resolution, and community building), social communications, visual communications, and the ethics of effective communication. If you are planning on working with non-profit or advocacy organizations, government agencies, or socially responsible private corporations, this class is for you.

RS 4990: Digital Fabrication. 3 units. (Class Nbr 35121)

W 9 – 11:45 AM, Room 209-212, Behnam Samareh, Instructor

The primary focus of this Class will be on exploring different means and methods of production and fabrication. In this class, we will cover everything from basic shop tool operation to the beginnings of digital fabrication. This class will explore a wide range of fabrication techniques and processes including elements of conventional carpentry and wood construction. The class will also explore means of digital output including CNC milling, 3d printing, and laser cutting, as well as other new and experimental technologies and methodologies. There will be in class lectures, demos, and building assignments. Emphasis will be on sustainable and environmentally conscious design practices, material choice, and craftsmanship and the final product will be part of a system of interpretative and signage elements for the Lyle Center for Regenerative Studies.

RS 5400: Coalition Building. 3 units. (Class Nbr 30259)

W 1:00 – 3:45 PM. Room 209-218. Monique Lopez Garcia, Instructor

Constructive processes and methods of building coalitions to strengthen public awareness and create policy supporting regenerative practices. Theory and case studies of successful partnerships among government, business, community and environmental groups. Role of the media, judicial and political processes. Three hour lecture. Open to graduate students in other programs through permission of instructor.

