



## Expected Course Offerings for Minor Students & Non-Majors, Fall 2021

### **RS 1110: Introduction to Regenerative Studies. 3 Units**

**Asynchronous – Steve Sandifer, Instructor (Class Number 73851)**

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.**

**Asynchronous - Douglas Kent, Instructor (Class Number 73859)**

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.**

**M – 5:30 PM – 8:15 PM - Dean Kubani, Instructor (Class Number 73860)**

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.**

**Synchronous W 1:00 PM – 3:45 PM - Beth Anne Falstad, Instructor (Class Number 73861)**

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: Energy Efficiency and Energy Conservation. 2 units and 1 unit.**

**Synchronous T 6:00 PM - 7:50PM, and Th 6:00 PM - 8:50 PM - Eric Carbonnier, Instructor (Class Numbers 73862/73863)**

The increasing importance of the issues of energy use, energy independence, renewable energy, and climate change necessitates an understanding of the topics of energy efficiency and energy conservation. This course explores the environmental, social, political, and economic implications of energy efficiency and energy conservation. Coursework includes class discussions of readings and current events.

### **RS 4300/4300L: Current Applications in Regenerative Studies: Solar Energy Systems. 2 units and 1 unit.**

**Synchronous - F 1:00 PM – 2:50 PM and F 3:00 PM - 5:50 PM. Pablo La Roche and Timothy Kohut, Instructors (Class Numbers 73864/73865)**

This course explores connections between cultures and solar technologies, impact on climate change, and strategies to minimize anthropogenic impact. By implementing different solar technologies that are site and climate-specific, students will gain a deeper understanding of the principles and practical approaches to reduce our emissions. Topics include solar geometry, passive and active design, daylighting, renewable energy, net-zero carbon, building simulation, and energy codes. There is an opportunity to work on an international project on advanced nanotechnology coatings. Lab and Lecture must be taken concurrently.

### **RS 4500: Sustainable Communities. 3 units.**

**Face to Face - W 7:00 - 9:45 PM Building 209C Room 0101- Timothy Kohut, Instructor (Class Number 73866)**

**Asynchronous – Timothy Kohut, Instructor (Class Number 73867)**

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 4650: Ecological Processes. 3 units**

**Hybrid Synchronous F 2:30 PM – 5:15 PM – Douglas Kent, Instructor (Class Number 75120)**

The resiliency of California's urban areas is constantly being tested. Blackouts, droughts, earthquakes, floods, riots, wildfires, and now pandemics have challenged the state's ability to deliver vital services time and time again. Join this class and learn how to create urban areas that provide access to essential goods and services. This class provides an overview of the energies, products and services that can be captured, grown and harvested from managed landscapes. More specifically, we will explore energy, food, landscaping, medicine, public health, self-care, textile, timber and water systems. The goal for this class is to create urban areas that prioritize resiliency and the regeneration of essential goods and services. Because this course is both conceptual and practical, a majority of the assignments are creative and hands on.

**RS 4990-1: Material Research and Fabrication. 3 units.**

**Face to Face M and W 11:30 AM – 12:45 PM Building 209C Room 0101, Behnam Samareh, Instructor (Class Number 73868)**

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.

**RS 4990-2: Permaculture Design. 3 units.**

**Hybrid Synchronous T and Th 8:30 AM - 9:45 AM - Larry Santoyo, Instructor (Class Number 73869)**

Permaculture is Design Protocols for Decision Making and Problem Solving based on the Patterns of Nature. Using a multidisciplinary approach this course will focus on the requisite systems of food, water, shelter, energy conservation, waste management, education, economics, and others in designing and developing sustainable human settlements. The importance of the connectivity of these systems will be stressed through an in-depth introduction to the ethics, principles, and practices of permaculture design as well as systems ecology, global indigenous practices, biomimicry, and design thinking. Topics relating to regenerative farming, soil-food-web, climate conditioning and biodiversity, natural building, cultural inclusivity, accessibility, education, restoration, and urban productivity will be explored and demonstrated in students' final design presentations.

**RS 4990-3: Placemaking through Art 3 units.**

**Thursday 1:00 – 3:45 PM – Cybele Lyle, Instructor (Class Number 73870)**

Inspired by the Center for Regenerative Studies, this course will explore connecting to place through the practice of art making. We will learn about a wide range of artists who work in this way, looking at examples of site-specific and site-based work, land art, performance, mapping and signage art and relational aesthetics, among others. We will start with an open exploration of place, focusing on where each student currently is situated – your neighborhood. We will then expand to getting to know the Center through learning about the basic ideas behind its design and existence. Throughout the course we will do a range of observation and response-based projects such as drawing, writing and photography that connect us to place - wherever we are. We will use these explorations to understand our own place and how that place relates to the Center. Students will observe place over time to first connect to the place where we each live and then to find a project that will connect in some way to the Center. The class will incorporate the sense of connect and disconnect to a place based on physical distancing - what does it mean to connect to a place that is far away? What does it mean to connect to our own home? Students working in any media and from any major are encouraged to take this class as an interdisciplinary range of backgrounds, experience and ways of thinking will benefit the group.

**RS 4990-4: Illuminating Regenerative Practices Through Alternate Realities. 3 units.**

**Face to Face Th 1:00 PM – 3:45 PM - Building 209C Room 0101, Travis Falstad, Instructor (Class Number 73871)**

In this class, Students will learn to tell the story of regenerative technologies through one of the most anticipated and least understood communication mediums yet created. We will dive into history, present day uses, and immediate future of AR and VR. What's the production pipeline? What factors make a compelling experience? How can you create a message that gets people's' attention? Once we have established the basic framework, we will discuss The Lyle Center, what makes it special, and the technologies showcased on campus. Then we will approach each installation and deconstruct which types of experiences best articulate the vision and purpose. We will conclude with a functional application students can add to their portfolios.

**RS 4990-5: Urban Infrastructure 3 units.**

**Synchronous - M 7:00 PM – 9:45 PM - Monique Lopez, Instructor (Class Number 74036)**

In this course, we will examine infrastructure through social history: who plans it, who funds it, who uses it, and who changes it? We consider the political and economic stories behind infrastructure planning and development. We will learn how people manage to use imperfect systems, and how we have layered new systems over old. We will also learn about the urban-rural connection of "urban infrastructure" and the environmental injustices that the existing system of urban infrastructure is reliant upon in order to allow a life of convenience for some. We will study how people leverage the political process, technical expertise, and grassroots organizing to make infrastructure more sustainable. "

**RS 4990-6: Circular Business Models. 3 units.**

**Synchronous Th 4:00 PM – 6:45 PM - Kevin Grell, Instructor (Class Number 75393)**

In this class, we introduce and work with a relatively new concept: Circular Business Models. Circular businesses shift the traditional profit seeking corporate objectives, to concentrate on redesigning and restructuring Product-Service-Systems from the bottom up. They are deeply involved in how their products are used, and identify opportunities for recycling, up-cycling and similar; they rethink the conventional producer-consumer-relationships and dismiss wasteful linear practices; and they promote ecological and social factors complement the overall business culture and philosophy. When taking this class, students get a formal introduction to how these businesses operate and several hands-on experiences such as site visits will be scheduled throughout the semester. This is a great way for students to get a sense of how businesses have started to leverage the knowledge of regenerative studies in their business practices. This class is well suited for students who are curious about how companies have responded to an increasing demand for sustainable practices by consumers, grassroots- and advocacy groups, NGOs, and (local) government.