# Continuing Ed Sustainability Courses OLLI 2015-2017

#### **Carbon Pollution, Climate Change and Rogue Consequences**

The course will address the basic science of carbon pollution and climate change, its physical and biological consequences, local trends and projections, what we can do, and the science relating to climate denier claims. The format will be presentation discussion using PowerPoint based presentations.

# Climate Change and the Rogue Valley

The course will address the basic science of greenhouse gas pollution and climate change, its physical and biological consequences, local trends and projections, what we can do, and the science relating to climate denier claims. The format will be presentation-discussion using PowerPoint-based presentations. Participants should come with an enthusiasm to understand the science of global warming and its physical consequences from a scientific perspective. A willingness to ask questions to clarify presentations and assist understanding will also be valuable. The content of the course will build through the term with subsequent discussion dependent on understanding earlier ideas.

# **Moonrise: Global Women Leading from the Heart**

Women's ascent is occurring in every part of the globe, and this emergence is among today's most hopeful trends. What are new ways of leading that women are creating to address issues that include women, nature and sustainability, cultural diversity, new living economies, and the use of digital and social networking for cultural transformation? Explore the role of the moon in women's rituals and its impact on women's action to re-imagine and remake the world. The stories of these women will ignite your full creativity and purposefulness in reinventing how we live on Earth at this pivotal time. No prior knowledge or experience is required. Class will combine lecture, ritual circle sharing, group discussion, and reflective writing.

#### Hydraulic Fracturing (or Fracking) for Oil & Gas Recovery

Fracking has changed the oil industry and the U.S. energy outlook in significant ways, but it does not come without concerns. Learn what fracking is, how and why you would do it, and the issues associated with the technology. Examine specific incidents attributed to fracking gone wrong and find out the underlying story. This course will help you understand the process and will allow you to make your own informed decisions.

#### **Upcycle Your Old Jewelry**

Wish your jewelry fit your "today" lifestyle? If old pieces hide inside a box, learn how to give them new life, personality, and purpose. In this hands-on class we'll focus on stringing beads. Through lecture, demonstration, and coaching, you'll learn about stringing onto various materials, bead options, color matching, and how to use tools and make design decisions. You'll take your jewelry apart and create it anew; your project will be completed within the course. No beading experience necessary

### Climate Change: "The Years of Living Dangerously"

Do you want to understand more deeply how climate change is impacting real people now? Would you prefer to feel hopeful rather than helpless to do something about the impact of global warming on our climate? Join us in viewing the Showtime Emmy Award-winning documentary series "The Years of Living Dangerously" and reading Joanna Macy's book "Active Hope: How to Deal with the Mess We're In without Going Crazy." Each week we will watch one episode of the series of nine and follow it with time to share reflections, processes, and inspirations from Macy's book. Please note that season two of the series premieres on the National Geographic channel on October 30, and, if it is available, we will be showing that season. No prior knowledge or skills are expected. We ask only that participants have a desire to better understand the effects of global warming and participate in related discussions and activities.

# Interconnections: Protecting our Environment

"We live in a world of complex, intertwined relationships. The loss of one, small species may not touch us, but it can set in motion a chain of events that ultimately damages our existence. By giving back to wildlife, you give to the future."—Rebecca MacLeod, NRCS district conservationist. In this course you will learn about our unique natural

environment around Ashland and the Cascade-Siskiyou National Monument western drainage. We will explore together and help protect our local natural resources both through class presentations and through a field/work trip. No special skills or background knowledge will be required, merely an interest in learning about and protecting local natural areas. Excerpts from "A Sand County Almanac" will be provided along with a bibliography.

#### **Got Time? Make a Difference**

Did you know that there are more than 1,300 charitable nonprofits in the Rogue Valley? If you have time to volunteer and want to make a huge difference in the community, this course is for you. In session one you will participate in an engaging discussion and self-assessment to help you determine your unique skills and interests for volunteering. In session two you will see a demonstration of how to search for local charities in three primary areas: education, health, and environment. You will learn how to narrow your search to a handful of charities that might be a good fit for you. In session three, since most nonprofits survive on private and public grant funding, you will learn three steps of the grant writing process that every nonprofit volunteer should know about even if you are not interested in learning how to write winning grant proposals.

#### **Wastewater Treatment and the Water Cycle**

This two-class-meeting class will look at the basic water cycle and describe the interactions we humans have with it. Emphasis will focus on wastewater treatment as an important part of the water cycle. Additionally, the class will introduce participants to many of the various types of wastewater treatment technologies, emerging technologies that will be increasingly important in the future of wastewater treatment, Oregon regulatory requirements as they relate to Medford's regional wastewater treatment facility, and emerging regulatory issues. Participants do not need prerequisite training or education in wastewater treatment or environmental studies. There are no specific texts or materials necessary for the participant to provide other than supplies for taking notes.

#### **Organic Gardening**

Organic Gardening will include personal safety, composting, soil preparation, fertilizing, and watering. There will also be information on tools and ideas for various vegetables, their planting and harvesting.

### Honey Bees, Bumblebees, Humans, and Pesticides

The behavior and physiology of the honeybee, Apis mellifera, the most agriculturally important benefi- cial insect, will be explored. Topics include colony organization, reproduction, communication, foraging behavior, navigation, pollination, nutrition, diseases, pesticides, and the contributions of the pesticide industry to colony collapse disorder. Bumblebees are also important pollinators that are suffering from agricultural practices and whose range is threatened by global warming. Finally, human neurological disorders including dementia are on the increase coincident with the increasing use of petrochemicals and neurotoxic insecticides.

# Our Revolution: A Future to Believe In

For 10 weekly two-hour sessions, participants will read, listen to, and explore concepts shared in Bernie Sanders' New York Times best seller Our Revolution: A Future To Believe In. Sanders shares his personal experiences from the campaign trail (session 1), and, for the millions looking to continue the political revolution, he outlines a progressive economic, environmental, racial, and social justice agenda to transform our country and our world for the better (sessions 2–10). Our class will explore 10 different agendas for how to transform our country – defeating oligarchy, American middle class, a rigged economy, healthcare, affordable higher education, climate change, criminal justice, immigration reform, protecting our most vulnerable, and corporate media threats to our democracy. Each week we will assign reading homework and ask participants to bring in questions and comments to discuss with other class participants.

#### Communicating with the More than Human World

We are educated to think that our interactions with nature are subject/object. We are the ethical, human subjects and the rest of nature is the object of our observation, concern, or use. We think of nature as less than human, as something to serve our needs or something to protect. In this course, we will encounter nature as relationship. We will explore ways to deepen that relationship through opening our hearts and minds to deep and active communication with the other

# The Farm at Southern Oregon University

Spend time on a sustainable farm right in your backyard. Each session will be about half and half classroom instruction and farm work. The Farm at SOU is a center for sustainability in its third year of production. The student-led organic farm produces healthy, sustainably harvested food for the SOU community. It is a hub for education, student and faculty research, and community outreach to the Rogue Valley. Projects on the farm inspire a generation of ecologically committed leaders who promote a vision of living and working sustainably in community and on the land. You will meet the SOU students and faculty who run the farm and learn about sustainable agriculture, how to use tools, and how to tend and harvest crops. You will also help to distribute food to the farm's Community Sponsored Agriculture participants.

### **SOU's Honors College Democracy Project**

Involving Southern Oregon University Honors College scholars, other interested students, faculty members, and community members, the Democracy Project is a comprehensive examination of democracy around the world in the 21st century. Some of the issues studied include the historical evolution of democracy, sovereignty, nationalism, citizenship, feminism, patriotism, imperialism, freedom, liberty, security, and equality. The Democracy Project is coordinated by professors Prakash Chenjeri and Ken Mulliken. This OLLI course will provide an overview of the project and a summary of the current status. Focus will be placed on examination of different democratic models and frameworks around the world, discussion of the social and cultural contexts in which they have evolved, discussion of threats and challenges to democracy in the 21st century, and the degree to which the promotion of sustainable democracy is valuable and at what potential cost.

#### The Physics of History

This video class is part of the Great Courses taught by Professor David Helfand of Columbia University where he is a professor of physics and astrophysics. The class is required for all undergraduate students at Columbia. Helfand shows how the isotopes of many elements can define history, climate change, art forgeries, and food types and purity. Particle physics, radioactivity, the atomic clock, tree rings, ice cores are topics as are "we are what we eat" and "a plant is what it eats." He discusses the origins and early history of life, the history of the Earth's atmosphere, and the formation of the universe. The life of "Otzi," the iceman found in 1991 frozen in an Austria glacier, was defined in detail by atomic analysis of his bones and hair. The Anasazi's Chaco Canyon history was supplemented by strontium isotopes from corn cobs grown in soils near the Chuska Mountains 50 miles away.

# **Understanding Persistent Racial Inequality in American Life**

Given the new volatility of race relations in the United States, this course explores the meaning of race in contemporary American life, and it explores the stubbornly persistent patterns of discrimination and inequality in life experience that are shaped by race. It presents theoretical perspectives and recent empirical findings from the social sciences that help describe and explain old and new racial tensions. The course is structured as a series of four lectures by SOU faculty in the sociology and anthropology program who teach and do research on race. April 14 – History of a Concept: The Biology and Anthropology of Race by Dr. Mark Tveskov. April 21 – Color-Blind Racism and White Privilege: Insights from Critical Race Theory by Dr. Kylan de Vries. April 28 – Changing Beliefs and Attitudes about Race: Exploring the Evidence from Survey Research by Dr. Mark A. Shibley. May 5 – Persistent Patterns of Racial Discrimination: Recent Empirical Findings on Disparate Life Outcomes by Dr. Echo Fields. One reading assignment related to each lecture will be made available online at the beginning of spring quarter. Each class session will include a lecture followed by questions and a discussion of the implications of these social scientific perspectives for civil discourse and social policy in the U.S.

#### **Great Decisions**

Interested in sharing your views on challenging issues facing all of us? Great Decisions, a global affairs discussion program produced by the Foreign Policy Association, involves reading an article in the Great Decisions Briefing Book about a specified topic prior to class each week, watching an associated 30-minute video in class, and discussing the issue. Each week the class will focus on one of the following eight topics: Middle East Alliances; The Rise of ISIS; The Future of Kurdistan; International Migration; Korean Choices; The United Nations Post-2015; Climate Geopolitics; and Cuba and the U.S.