Osher Lifelong Learning Institute at UM (MOLLI)

Fall 2018 (23 total courses offered, 5 sustainability)

Nuclear Fallout to Global Warming: The US Environmental Movement

This class will examine the history of the U.S. environmental movement -- or movements -- since World War II. We will discuss the ideas of major figures, like Rachel Carson, and narrate some of the major environmental events, such as Earth Day and Love Canal. Along the way, we will ask some fundamental questions about the environmental movement: How was the post-World War II movement different from the earlier conservation and preservation movements? How did women, racial minorities, and working-class people perceive and participate in the movement? Why did the movement emerge so powerfully in the 1960s? What were its accomplishments and failures? How has it changed due to political shifts and concerns about justice, global development, and climate change?

Understanding Your Public Lands

Have you ever looked at a map and seen all the colors that represent different land ownerships? Many of those lands are managed by a public agency. The purpose of this course is to provide the audience with the basic information about five different land management agencies that are responsible for managing public resources, not only within

the Missoula area but throughout the state of Montana. A representative from each agency will cover the basic organizational structure, history, mission, public involvement processes, and policies that provide side boards for management decisions. This six-session course will consist of one presentation from five different federal and state. Agencies and will culminate in a panel discussion amongst all the Agencies and the audience.

Preservation of Montana and the Region's Architectural Resources

The course will present Montana and the surrounding area's rich architectural history citing the region's builders, architects, and various architectural styles. National Parks in the Rocky Mountain Region will be discussed, including the influence of the region's railroads. Emphasis will be placed on Missoula, Montana, particularly the city's extensive preservation efforts and the importance of protecting the region's cultural resources and maintaining our sense of place. A walking tour of the University of Montana and University neighborhood historic districts will be offered.

New Perspectives on Native American History

The history of Native Americans bears little resemblance to popular lore about Indians as mystics, warriors, or victims. This course will critique EuroAmerican constructions of Indian identity and reframe Native American people as active agents in history. Stories of Native innovation and resilience will balance the story of European invasion and colonization. Throughout the course, we will re-periodize and remap North American history using tribal standards of significance. Most of our class time will be spent in discussion based on assigned readings rather than lecture. Be prepared to read 2-3 articles per week. DO the readings, so you can offer informed comments!

History Tales Along Montana Trails

Montana has a history as rich as our beloved Big Sky. From Glacial Lake Missoula to Triple Divide Peak, Yellowstone and Glacier, grizzly bears and the pronghorn, the dog Shep, the much-traveled elk Earl, Indian tribes inhabiting the plains and mountains, explorers and trappers, cattlemen and rustlers, politicos famous and infamous, suffragettes,

railroaders, homesteaders and town builders – Montana has it all. Chiefs Plenty Coups and Charlo; explorers Lewis and Clark; Custer and Sitting Bull; political leaders Jeannette Rankin, Mike Mansfield, and Elouise Cobell; writers A.B. Guthrie, Richard Hugo, James Welch, Norman Maclean, and Dorothy Johnson; beloved artist Charlie Russell; and the magical 1904 Fort Shaw Indian Girls' basketball team – all have contributed to making this very special place our home.

Winter 2019 (18 courses offered, 5 sustainability)

Wilderness and the Outdoor Industry

Why do Americans go shopping on their way to the woods? How has consumerism become a central part of nature experiences? This course introduces students to the history of the outdoor industry from the Civil War to the present. The central question of the class is this: How has the outdoor industry shaped Americans' understanding of wilderness? We will examine the origins of the outdoor industry in companies such as L.L. Bean, Eddie Bauer, and Abercrombie & Fitch; the influence of war and technological developments on the industry; the rise of specialty outdoor stores with the backpacking boom of the 1960s and 1970s; and the proliferation of high-tech companies selling outdoor fashions at the end of the twentieth century.

Zero Waste in the Last Best Place: Landfill-Free Living

Grossed out by garbage? Tired of trash? Wrestling with recycling? Join the growing number of Missoulians who are making landfill-free living a reality through zero-waste practices. This course covers several "big picture" ideas, such as the origin and nature of matter on planet earth, the rise of the built environment, and the proliferation of synthetic materials. The course then moves into local problems and solutions for wading through waste. Students will enjoy lectures, anecdotes, simple (ungraded) homework assignments, group discussions, and the opportunity to join local grassroots movements towards a zero-waste community.

The Future We Are Making

Humanity's impact on the planet is so huge that we have entered a new geologic epoch, the Anthropocene or Human Age. The pace of change we continue to impose is extremely rapid and accelerating. Will we be able to manage the ongoing and future transformations, some of which we likely cannot anticipate?

On Earth as in Heaven: Creation, Climate, & Eastern Spirituality

Can the ancient spirituality of Eastern Christianity provide guidance for the modern world on the challenges of climate change and environmental degradation? Former Vice President Al Gore said "yes" and named the Ecumenical Patriarch of the Eastern Orthodox Church, Bartholomew 1, "The Green Patriarch" because of his focus on the environment and how people of faith can participate in the care and healing of creation. Using scripture, patristic writings, iconography, hymnography, and contemporary writings, this class will provide an overview of Eastern Christian teaching on the Genesis narrative, the role of humanity in creation, and how creation reflects God's presence in the world—all while focusing on the work of Patriarch Bartholomew to invite people of faith to attend to these modern challenges.

Energy: Science, History, and Geopolitics

Energy is an important driving force behind many changes we see around us, ranging from the behavior of the simplest organisms to decisions made by entire societies. Energy provides a fascinating context for understanding our world from scientific, historical/political, economic, and humanistic perspectives. We will examine fundamental concepts about energy with a non-technical approach, illustrating the power and limitations of energy in living and non-living

systems. We will learn how energy has driven societies historically and today, examining the current practice of energy production and use around the world.

Spring/Summer 20 (27 courses offered. 10 sustainability)

Microbes, Megafauna, and Our Greater Selves:

Since the 1970s, the world's human population has more than doubled to nearly 8 billion, and wildlife numbers have dropped by more than half. Species and ecosystems everywhere are in serious trouble. Our efforts to conserve them have so far been no match for the scope of losses underway. This presentation will focus on recent biological findings that reveal how organisms function differently than previously thought, thus changing our view of and relationship with the natural world. These discoveries are fascinating, and what they tell us about the actual nature of nature – within us as well as around us – could spark major changes in societies' commitments to protecting the splendor and vitality of the only living planet we know.

Freshwater Ecology of the Flathead Watershed

The Flathead Watershed is a priceless public resource supporting a healthy ecosystem and economy. Since its founding in 1899, the Flathead Lake Biological Station has been studying water in the Flathead (and beyond) and serving as "Sentinel of the Lake." Discover the Flathead and learn about freshwater ecosystems through the legacy of the Bio Station's scientific research, which has often been used by resource managers, politicians, and conservation groups to guide decisions. This class will examine the past, present, and future of Flathead Lake and the Flathead River system, including protection of and threats to its famed water quality.

World National Parks

National parks protect unique natural and cultural heritage sites and provide exceptional recreational, educational, scientific, and spiritual opportunities. We'll first explore how the National Park idea was developed in the US in the 1870s and how it led to the creation of the current system of diverse protected areas around the world that now cover almost 15% of the terrestrial area. Then we'll look at the parks of Russia, Australia, Europe, South America, and Africa, explore their wonders and values, and discuss their unique potential and challenges. Finally, we'll focus on the contemporary issues that American parks face, such as balancing recreation and preservation amid rapid environmental change, and then explore the challenges that parks may be facing in the coming decades in the era of complexity.

Stream Science for Fly Fishing

The challenge of fly fishing – to present a fish with the right fly in the right way under the right conditions – poses many ecological questions. How do trout select which prey to target? How does temperature govern fish metabolism and feeding strategies? How are the lifecycles and behaviors of stream insects affected by environmental conditions? This course doesn't require any fly fishing experience and will not provide technical fishing instruction, but anyone who loves fishing, wading, or floating streams and who craves understanding more about science under the surface will find something to appreciate.

Plant Communities of Western Montana

In this botany course, we will learn about the plants we might find in grasslands, shrublands, dry forests, moist forests, and wetlands in western Montana. This course is suitable for a novice or budding botanist. Learning is facilitated by a combination of lectures with an emphasis on plant photographs, plus hands- on work using books, keys, and fresh plant materials. Other topics covered include plant phenology, plant ecology, and native vs. exotic plants. Students will gain

confidence in plant identification and leave the course with a richer knowledge of the fascinating diversity that surrounds us.

Beginning Birding Class

Join two members of the Five Valleys Audubon as they take you on a beginning birdwatching experience. You will visit three different sites in the Missoula area: Lee Metcalf National Wildlife Refuge, Fish Wildlife & Parks Erskine fishing access, and Maclay Flat. (The locations may change due to river conditions.) You will learn the basics of bird identification by sight and sound. Students should be able to take a few easy walks in the field on mostly flat roads and trails.

Bird Watching for Beginners

Have you ever wanted to add a new dimension to your life through bird watching but felt too intimidated because you thought you would be joining a bunch of experts who promptly leave you in the dust? Then this is the course for you! Join Dick Hutto and Sue Reel for an introduction to the tools and means that people use to identify and appreciate birds. This activity will literally change your perception of the world. Students will learn how to watch and listen to birds and how to use information that is much more valuable than the information printed in field guides. On each of three days, we will take easy walks in the field on mostly flat roads and trails.

Food for Thought: Exploring Our Food Safety System in the US

Food is an important element in our daily lives and culture. Food safety is an often misunderstood subject, often complicated by the media, the internet, and marketing. This class will ask participants to think about their current perceptions of food safety, the food system, regulation, and their behaviors. It will explain how the food regulatory system works, the science (and sometimes complicating politics behind it), and strengths and weaknesses in our system. Additionally, the course will give participants an insider's look into today's food inspection world and present case studies from outbreak investigations. Participants should leave the course with a better understanding of the system and better tools to protect their own health.

Lichen Walk

Learn about lichen on a two-hour walk and talk at MaClay Flat. We will discuss the fascinating biology and ecology of lichen and learn how to identify our most common species. Lichen can be studied at any time of year and are wonderfully diverse in our area, making them an ideal subject for our investigation.

Missoula Natural History: An Introduction

Join this field-based course and work toward a greater understanding of common flora and fauna in the Missoula area. As we explore some of Missoula's natural areas, we will focus on familiar bird, mammal, plant, and insect species. We will also practice identification skills so students are better able to identify natural specimens on their own. As we observe and identify various species, students will keep track of their findings in nature journals, allowing them to hone their skills as observers and documenters of the natural world. Students will leave this course with a greater knowledge of common animals and plants, basic species identification techniques, and the skill of nature journaling.