

Humanities Seminars: **Understanding our Changing Forests**

10:00 AM-12:00 PM, 2, 9, 16, 23, and 30 June 2020 – Online using Zoom

Course summary:

Forests are the dominant ecosystem of the Earth's land area and play important roles in many processes that affect human society and our global economy. Forest structure and function are being altered by human activity, most critically by climate change. In this course we will examine the variety of the Earth's forests and the particular characteristics their occupants exhibit. We will discuss many of the ways in which forests and humans are connected including carbon storage, deforestation, wood production, fire, biological diversity, recreation, health and well-being, and water quality and volume.

Course outline:

1. An introduction to the course. **What is a tree?**
 - a. Why a course on forests?
 - b. Defining a tree can be difficult
 - c. Tree growth processes
 - d. The many advantages of being woody
2. Let's put some big trees together. **What is a forest?**
3. Location matters. **Where are forests?**
 - a. Boreal forests are vast, unfamiliar, and changing rapidly
 - b. Temperate forests are most familiar and have been highly altered
 - c. Tropical forests are closely associated with climate change
4. Quietly they accomplish so much. **What do forests do?**
 - a. Storage of carbon
 - b. Providing habitat and supporting biological diversity
 - c. Affecting water supply and quality
 - d. Contributing to human well-being
5. We should take better care of them. **What are we doing to forests?**
 - a. Deforestation and land conversion
 - b. Generation of forest products
 - c. Disruption of fire regimes

Readings supporting this course:

- Leary, John. 2017. One Shot. Trees as Our Last Chance for Survival. Trees for the Future, Silver Spring, MD.
- Maloof, Joan. 2016. Nature's Temples: The Complex World of Old-Growth Forests. Timber Press, Portland, OR.
- Manning, William J. 2020. Trees and Global Warming: The Role of Forests in Cooling and Warming the Atmosphere. Cambridge Univ. Press, Cambridge.

Mapes, Lynda V. 2019. Witness Tree: Seasons of Change with a Century-Old Oak. Bloomsbury, New York.

Perlin, John. 2005. A Forest Journey: The Story of Wood and Civilization.

Pyne, Stephen J. 2019. Fire. A brief history. 2nd Ed. Univ. Washington Press, Seattle.

Seymour, Francis and Jonah Busch. 2016. Why Forests? Why Now? The Science, Economics, and Politics of Tropical Forests and Climate Change. Center for Global Development, Washington, D.C.

Contact hours:

2 hours/meeting × 5 Zoom meetings

Instructor:

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