

## **WOODBURY** Spring 2024 course offering:

## ENVT 230: Ecology/Earth Sci./Infrastructure

This course invites students to consider and acknowledge the symbiotic relationship between the natural and built environments, and how our personal ecological footprint at the micro-level and infrastructure at the macro-level impact those environments. Course readings, movies, and field trips help students understand the delicate balance between our ecosystems and urban contexts, and the need for development to occur in more sustainable ways. Students explore responsible decision-making tactics and processes such as the use of "negative emissions" as a means of ecosystem restoration, and how to leverage our own agency and advocate for change.

This first year course has no pre-requisites and meets weekly on Friday mornings. We will have the benefit of remote lectures and media, but will also have in-person field trips throughout the San Fernando Valley and the Los Angeles region.

While the course lectures are designed around major environmental problems, we will examine the current and future solutions to our major challenges, the climate crisis, and the need to address:

- The peril and promise of the built environment.
- Sustainable solutions in design and architecture
- The urban waste challenge: landfills, and wastewater treatment
- Wildlands conservation and restoration
- Water conservation
- Alternatives to infrastructure and energy sources.
- New Urbanism and city planning
- Greenhouse gas emission reduction in buildings, transportation, and electricity generation
- Toxics in the home and workplace
- Food and agriculture, urban gardens

In every case we will include an analysis that takes into account geographic differences, demographic aspects of uneven impacts, and environmental justice.

## Possible fieldtrips:

- Tilden water reclamation plant
- Pacoima Beautiful toxics tour
- Burbank Water and Power
- Sunshine Canyon landfill
- Santa Monica SMURFF
- LA Kretz innovation campus
- SCI-ARC
- TreePeople
- Alta Sea in San Pedro

Required text: <u>Principles of Environmental Science 10th Edition</u>, by <u>William Cunningham</u> (Author), <u>Mary</u> <u>Cunningham</u> (Author), <u>Catherine O'Reilly</u> (Author) ISBN 978-1-264-09118-8 <u>Sustainable Practices Course Requirements</u>