

2019 Academic Excellence Showcase, May 30

Session ID: 386

Title: Earth Science Senior Seminar Theme Session - "Forest Hydrology and Geomorphology: Perspectives from the Pacific Northwest"

This theme session involves presentation by WOU Earth Science students enrolled in ES407 Senior Seminar. The focus is on forest hydrology and geomorphology with case study examples from western Oregon. Watersheds are comprised of channel networks and represent one of the most fundamental landscape systems on the Earth's surface. They provide ecological services along riparian corridors that form critical habitat in the Pacific Northwest. The historic interplay between human occupation, intensive land management, and fluvial systems has resulted in significant impairment of waterways over the past century. This theme session provides an overview of hydrogeomorphic processes in relation to forest management practices as applied to mountainous watersheds in western Oregon. Study topics include hydrologic process, mountain geomorphology, soils, erosion / sedimentation, wood recruitment, carbon cycling and effects of climate change.

Location: HWC301

Presentation Mode: Oral Session

Faculty Sponsor: Steve Taylor, Professor of Geology, Earth and Physical Science Department, Western Oregon University

12:45-12:55 PM (10 min)	Taylor Introduction
12:55-1:00 PM (5 min)	Questions/Speaker Transition
1:00-1:20 PM (20 min)	Palmer Baldwin, "Hydrologic Response to Timber Harvest and Forest Management Practices in Western Oregon"
1:20-1:25 PM (5 min)	Questions / Speaker Transition
1:25-1:45 PM (20 min)	Tim Hagen, "Sediment Dynamics and Erosion Response to Forest Management Practice in Western Oregon"
1:45-2:00 PM (15 min)	Session Break
2:00-2:20 PM (20 min)	Austin Wegner, "Forest Road Construction and Sediment Production in Western Oregon"
2:20-2:25 PM (5 min)	Questions / Speaker Transition
2:25-2:45 PM (20 min)	Hunter Collins, "Landslide and Debris Flow Occurrence in Forested Landscapes of Western Oregon"
2:45-2:50 PM (5 min)	Questions / Speaker Transition
2:50-3:10 PM (20 min)	Samantha Abel, "Perspectives on Climate Change and Forest Hydrology in the Oregon Cascades"
3:10-3:15 PM (5 min)	Questions / Speaker Transition
3:15-3:30 PM (15 min)	Taylor Concluding Comments