

# Ecosystem Ecology and Global Change

## Biol or EnvSci 469 / 569

Instructor: R.D. Evans (rdevans@wsu.edu)

Class Meeting: TU, TH 12:00 – 1:15

Credits: 3



**Join us** to critically explore and evaluate collective, relevant literature and ideas of ecosystem ecology and responses to global change. Understand human influence and dependency on ecosystem processes. Promote your ability to do interdisciplinary thinking and development to solve complex ecological issues. Develop your understanding of biophysical, interactive processes governing ecosystem dynamics and function and their responses to global change

The course will integrate biotic interactions and abiotic processes with studies of paleoclimate and future climate change to understand the distribution and function of major landscape units. Emphasis will be on biodiversity and ecosystem function, reconstruction of paleoclimate and past species distribution, and models that attempt to predict climate change and future species distribution for both terrestrial and aquatic ecosystems. Topics covered in the course the structure of ecosystems, energy flow and nutrient availability, biodiversity, the role of natural disturbance, all in the context of current global change.