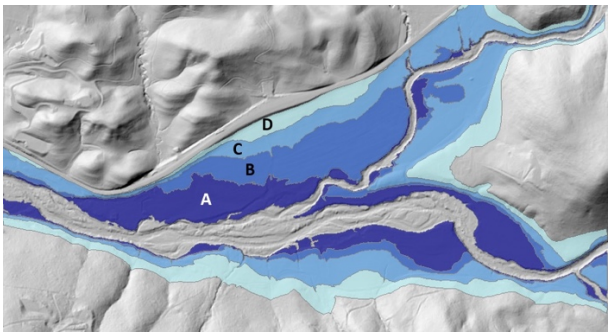
# ANALYZING LANDSCAPE SYSTEMS

## Landscape Architecture 4/513 Spring 2019

**Tuesday/Thursday 6:00-7:50 PM in Pacific 30**

Professor Rob Ribe, 476D Lawrence Hall, rribe@uoregon.edu; Graduate Employee Instructor TBD




This class studies how landscapes function to produce ecosystem services. It builds knowledge and skills in assessing these functions to prescribe actions to maintain, enhance or minimize damage to these services.

Students from all majors except landscape architecture are welcome. A prior basic physical geography course, or other basic natural science class is recommended. You do not have to be able to draw. Lab assignments will entail drawing or commenting on maps downloaded from the internet. All readings will be on-line.

The analysis of landscapes is important in land use planning, geography, architecture, landscape architecture, real estate development, environmental advocacy, and land management. It integrates physical, biological, social, legal, cultural, aesthetic and economic considerations in sustaining many services from landscapes.

The class aims to familiarize students with basic landscape sciences and information to understanding how places came to be as they are, how they function, and how they ought best evolve. This class will introduce the collection, understanding, and evaluation of information about geology, geomorphology, soils, microclimate, ecology, hydrology, geology, aesthetics, zoning, land use, and decision synthesis.

Learning Objectives that will be the Basis of Grading:

- accurately read and produce maps locating natural resource information in relation to topography;
- understand and correctly interpret mapped and other data that informs land use and design decisions;
- apply geologic and hydrologic information to understanding floods, water quality and water supplies;
- apply micro-climate attributes to landscape places as they effect energy consumption and production;
- know how soil attributes effect land decisions and why different soils occur in types of land areas;
- understand how plant communities evolve and can be identified effecting habitat & biodiversity goals;
- estimate how landscape places and changes can affect the professional assessment of scenic impacts;
- analyze land use and regulations as they effect what can be legally done in different places and how;
- assess how anthropogenic landscape changes can better optimally produce watershed health.

Graded Tasks:

- Each undergraduate student will produce assigned annotated maps and plans of study areas within particular topical land attributes. They will make suitability or design recommendations for each map. Students will produce draft maps and recommendations for critique by the instructors. These will be corrected by students and synthesized into a final report due at the end of the term.
- Teams led by graduate students will have more independently directed and challenging lab assignments and produce professional quality final reports for delivery to Albany. Graduate student led teams must include analyses derived from readings required only of graduate students in every lab assignment's product, and these must be cited in the written part of these assignment products.
- There will be no final exam. The topics covered in class and required readings will be the subject of a series of on-line quizzes though the term.