LA 362 Landscape Technologies I – Topography, Surfaces, and Water

CRN: 23382 4 credits
Tu/Th 9:00-11:50 Winter 2015
Instructor: Leslie Ryan lryan@uoregon.edu

Herbert Bayer (1982). Mill Creek Canyon Earthworks, Kent, WA

Catalog description:
Develops understanding of contours, contour manipulation, and site engineering methodologies in the design of places; fundamentals of inclusive design, storm water management, earthwork, and design development.

Course:
This course introduces concepts and methods of grading and drainage, and explores how landscape architects, architects, and artists use landforms and water flow as tools in design and environmental problem-solving. There are social, ecological, and poetic ramifications inherent to grading in the landscape. Topography provides the template for the development of soil, vegetation, and other biota, determining how and where habitat might emerge or be maintained. Water flow and speed responds to the shape of the terrain, which in turn impacts the potential of groundwater replenishment and water quality in received bodies. Sculpting new landforms or working with existing topography establishes the potential for the thickness, enclosure and depth of the land to be felt. And how we consider the shape of the land determines who has access and the quality of the experience.

Course content:
- Relationship between topography and design
- Grading terms and graphic standards
- Contours and landforms
- Slope analysis
- Earthwork design and calculations
- Grading site elements (walks, ramps, terraces, building pads, roads)
- Universal access
- Storm water management

Required text and workbook:
Storm, S., Nathan, K., & Woland, J. (2013). *Site Engineering for Landscape Architects*, 6th ed. Hoboken, NJ: John Wiley & Sons.
Woland, J. (2013). *Site Engineering Workbook*, 2nd ed. Hoboken, NJ: John Wiley & Sons.
Other readings will be made available by the instructor or are available online.