



**Site Grading Fundamentals Workshop
Syllabus for Winter 2022**

Instructor: Kim Erslev, Architect and Landscape Architect
Core faculty member of the Conway School

Description

Understanding the fundamentals of site grading provides the framework for all landscape design and building projects. It is also a critical skill to address problem drainage issues, flooding, and erosion on existing sites. In this course you will learn how to create a grading plan for a site to prevent erosion, move or infiltrate stormwater, create outdoor gathering areas, and design resilient building projects. Participants will learn how to grade planes, driveways, roads, buildings, and accessible paths. Students will also learn common slope requirements and basic math formulas to refine your grading plans. Participants should be familiar with plan and section drawing, topographic representation on site plans, and how to use an engineer's scale.

This class is self-paced, allowing students to move faster or slower as needed, however, the lecture portions will be presented as scheduled over the five-week period. Learning sessions build on each other, so participants should plan to attend all five sessions live. Lectures will be recorded and links to grading demonstration videos will be provided to participants prior to, during, and for a short time after the course is finished. Reimbursements will not be provided for missed class sessions.

Course Schedule and Zoom Link

Sundays 3:00-5:00 pm Eastern Time (US and Canada)

FIVE classes [no class on February 20]

Jan 23, 2022	Feb 13, 2022
Jan 30, 2022	Feb 27, 2022
Feb 6, 2022	
Feb 20, 2022 NO CLASS	

Zoom link will be provided to registered participants. All classes will be recorded on zoom for playback later. All class materials will be available to students after registration and for two months after the course.

For questions about the workshop:

contact Kim Erslev at erslev@cslid.edu; office hours available upon request

For for connectivity or logistical issues:

contact CJ Lammers at Institute@cslid.edu or 413-270-2372

All of the materials created for this course are the property of the Conway School.

Detailed Schedule

Prior to class participants will receive grading exercises via email and will need to print them out at 100% or actual scale for class on 8 ½ x 11" paper. Participants will need an engineer's scale, pencil, eraser, red pen, calculator, and a digital camera (can be a phone) or printer scanner (preferred). A flexible curve and rolling ruler are optional.

CLASS 1: January 23rd 3-5pm

- Introduction to the Fundamentals of Grading
- Grading conventions, signatures, and typical slope gradients
- Grading a plane in cut, fill, and cut=fill using retaining walls and 1:3 backslopes

CLASS 2: January 30th 3-5pm

- Grading roads, paths, and drives
- Laying out ADA paths on steep slopes
- Grading roads and drives with crowns and swales

CLASS 3: February 6th 3-5pm

- Grading with spot grades and formulas
- Adding spot grades to planes; side slopes; roads, curbs, and sidewalks

CLASS 4: February 13th 3-5pm

- Grading for stormwater management
- Grade check dams, off-contour swales, and infiltration basins
- Design and grade ponds and waterfalls.

NO CLASS ON FEBRUARY 20

CLASS 5: February 27th 3-5pm

- Grading building sites
- Site buildings using spot grades, swales, and positive drainage
- Class review problems and preview of Intermediate Class

Class Format (times may vary, based on number and depth of questions)

Before Class: Participants will download and print out practice sheets and homework and preview and/or review class videos when assigned.

3:00 pm Introduce and describe the new grading skills to be presented this class

3:10 pm Show new skills videos. Kim will answer questions afterwards

3:30 pm Students work on new grading skills using Practice Sheets 1 and 2
Kim will be available to help via zoom during this time to answer questions and demonstrate how to solve problems.

4:30 pm All participants meet back in the class zoom room
Kim will answer questions and do practice problems, as requested

4:50 pm Introduce homework assignment and answer last questions

5:00 pm End of class

After Class: Participants will photograph or scan worksheets and upload them to the homework folder in the class google drive. (Access will be provided after the first class)