CE 4410 Computer Aided Site Design

Department of Civil and Environmental Engineering

School of Engineering

University of Connecticut

Spring 2018

Textbook: Site Engineering for Landscape Architects, 6th Edition, by S. Strom, K. Nathan, J. Woland, 2013. ISBN: 9781118090862

Instructor: Nefeli Bompoti

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Class Meetings:

Lectures: Mon & Wed: 4:40 -5:30 PM, GENT 131

Lab: Section 1: Tue 8-10 am, CAST 117

Section 2: Tue 10 am-12 pm, CAST 117

Section 3: Tue 12-2 pm, CAST 117

Instructor office Hours: Wed 2-4 pm, CAST 105

TA: Amit Mondal **email:** amit.mondal@uconn.edu **TA office hours:** Mon 2-4 pm, CAST 205

UA: Ryan Kennedy **email:** ryan.kennedy@uconn.edu **UA office hours:** Thu 12 – 1.30 pm CAST 123

Catalog Description: Roadway and street network design and site development using computer software, including grading and earthwork, runoff and drainage structures.

Prerequisites:

CE 2410, enrollment in the School of Engineering

Course Requirements:

Regular attendance of the lectures is strongly recommended to understand the processes taught. The student is responsible for the material taught in a class not attended. All class presentations are available on HuskyCT.

IMPORTANT: Lab attendance is mandatory and it will be checked. You are not allowed to miss more than TWO lab sessions. Each additional absence will result in grade reduction.

No exceptions to deadlines are accepted without proper documentation from a doctor. Students are required to be available during for final exams week. Students must visit the Dean of Students Office if they cannot make their exam. The DOS will give the student his or her instructions thereafter.

The TA and UA is NOT responsible for your grades; all complaints should be directed to the instructor.

Grading:

Homeworks	**10%**
Lab Homeworks	**10%**
Lab projects	**25%**
Quiz I	**15%**
Quiz II	**15%**
Final	**25%**
Each missed lab session	**-2% (beyond the two allowed)**

Lecture Schedule:

Lecture Schedule: Week	Date	Day	Material	Chapter	HW*
1	17-Jan	Wed	Introduction		
2	22-Jan	Mon	Contours/ Interpolation and Slope	Chapter 3 & 4	
	24-Jan	Wed			HW1
3	29-Jan	Mon	Interpolation and Slope	Chapter 4	
	31-Jan	Wed	Grading Design and Process	Chapter 5 & 6	
4	5-Feb	Mon			HW2
	7-Feb	Wed			
5	12-Feb	Mon	Soils in Construction	Chapter 7	
	14-Feb	Wed	Earthwork	Chapter 8	
6	19-Feb	Mon			HW3
	21-Feb	Wed	**QUIZ 1**		
7	26-Feb	Mon	Stormwater management	Chapter 9 & 10	
	28-Feb	Wed			
8	5-Mar	Mon			
	7-Mar	Wed			
9	12-Mar	Spring Break			

	14-Mar				
10	19-Mar	Mon	Calculations of Rates and Volumes of Runoff	Chapter 12	HW4
	21-Mar	Wed			
11	26-Mar	Mon			HW5
	28-Mar	Wed	TR-55	Chapter 13	
12	2-Apr	Mon	Designing and sizing storm water management systems (swales and pipes)	Chapter 14	
	4-Apr	Wed			
13	9-Apr	Mon			HW6 (bonus)
	11-Apr	Wed	**QUIZ 2**		
14	16-Apr	Mon	Zoning		
	18-Apr	Wed	Zoning and Horizontal Road Alignment	Chapter 16 (only formulas and stationing)	
15	23-Apr	Mon	Vertical Road Alignment	Chapter 17 (only equal tangents)	HW7
	25-Apr	Wed	Review for final		
16	30-Apr	Final Exams week			
	2-May				

*****HW dates are approximate

Laboratory Schedule

Week	Date	Topic	HW	Project
2	23-Jan	Introduction to MicroStation - Part 1		
3	30-Jan	Introduction to MicroStation – Part 2	Lab HW1	
4	6-Feb	Introduction to InRoads	Lab HW2	
5	13-Feb	InRoads Site Analysis - Part 1	Lab HW3	
6	20-Feb	InRoads Site Analysis - Part 2	Lab HW4	
7	27-Feb	InRoads Create Proposed Surfaces - Part 1	Lab HW5	
8	6-Mar	Work on Project 1		Project 1 DUE on Mar 8th
9	13-Mar	**Spring Break**		
10	20-Mar	InRoads Create Proposed Surfaces - Part 2	Lab HW6	
11	27-Mar	Modeling Roadways in InRoads -Part 1	Lab HW7	
12	3-Apr	Modeling Roadways in InRoads -Part 2	Lab HW8	
13	10-Apr	Introduction to AutoCAD	Lab HW9	
14	17-Apr	Introduction to AutoCAD II	Lab HW10	
15	24-Apr	Work on Project 2		Project 2 DUE on April 28th