DEPARTMENT OF CIVIL MECHANICAL ENGINEERING
CE350 – INFRASTRUCTURE ENGINEERING

Course Syllabus for AY 21-1

	Academic Day		In-Class Delivery			Asynchronous Delivery		Assignment Due*
			Lesson		Group	Lesson		
Infrastructure Systems	1-1	17 AUG	IS-1	An Introduction to Infrastructure	1			Cadet Survey
	1-2	19 AUG			2			
						IS-2	Critical Infrastructure Sectors	
						IS-3	Network Theory	
	1-3	21 AUG	IS-4	Network Modeling	1			IS-2, IS-3, IS-4 RA
	1-4	25 AUG			2			
						IS-5	Component Modeling	
	1-5	27 AUG	IS-6	Assessing Infrastructure Systems	1			IS-5, IS-6 RA, Sketch 1
	1-6	31 AUG			2			
						IS-7	Infrastructure Resilience	
	1-7	02 SEP	IS-8	Stakeholder Analysis	1			IS-7, IS-8 RA, Sketch 2
	1-8	04 SEP			2			
						IS-9	Solid Waste Management and Social Equity	
Water & Wastewater	1-9	08 SEP	W-1	Water Resources and Distribution Systems	1			IS-9 RA
	1-10	10 SEP			2		PS 1	
						W-2	Dams and Levees	
	1-11	14 SEP	W-3	Water System Demand	1			W-2, W-3 RA
	1-12	17 SEP			2			
						W-4	Water Treatment Methods and Models	
	1-13	21 SEP	W-5	Water Treatment Plant Tour	1			W-4 RA, Sketch 3
	1-14	25 SEP			2			
						W-6	Wastewater Treatment Methods and Models	
	1-15	29 SEP	W-7	Wastewater Treatment Plant Tour	ALL			W-6 RA
	1-16	01 OCT	-	*DROP*	ALL			

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			Lesson		Group	Lesson			
						W-8	Water Resilience & Assessment		
						W-9	Water Sustainability		
Electricity	1-17	05 OCT	E-1	Introduction to the Energy Sector	1			PS 2	E-1 RA, Sketch 4
	-	06 OCT	WPR I	Written Partial Review I	ALL				
	1-18	07 OCT	E-1	Introduction to the Energy Sector	2			E-1 RA, Sketch 4	
						E-2	The Electrical System: An Overview		
	1-19	09 OCT	E-3	Electrical System Demand	1			E-2, E-3 RA	
	1-20	14 OCT			2				
						E-4	Generation of Electricity		
	1-21	16 OCT	E-5	Electrical Transmission	1			E-4, E-5 RA	
	1-22	20 OCT			2				
						E-6	Distribution and Use of Electricity		
	1-23	22 OCT	E-7	Power Consumption Lab	1			E-6 RA, Sketch 5	
	1-24	26 OCT			2				
	1-25	28 OCT	-	*DROP*	ALL				
	1-26	30 OCT	E-8	Power Plant Tour	ALL				
						E-9	Energy Sustainability		
Transportation	1-27	02 NOV	D-1	Infrastructure in Doctrine and Reconnaissance	1				
	1-28	06 NOV			2			PS 3	
						T-1	Introduction to Transportation		
	1-29	09 NOV	T-2	Systems Analysis I - Trip Generation and Distribution	1			Sketch 6	
	-	11 NOV	WPR II	Written Partial Review II	ALL				
	1-30	12 NOV	T-2	Systems Analysis I - Trip Generation and Distribution	2			Sketch 6	
						T-3	Systems Analysis II - Modal Analysis		
	1-31	16 NOV	T-4	Systems Analysis III - Flow Modeling	1			Recon Plan	T-4 RA
	1-32	18 NOV			2				

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			Lesson		Group	Lesson			
Transportation	1-33	20 NOV	D-2	Field Reconnaissance	ALL				
						T-5	Road Design		
						T-6	Traffic Control		
	1-34	23 NOV	D-3	Infrastructure in Doctrine and Sustainability	1				Sketch 7
	1-35	25 NOV			2			PS 4	
	1-36	30 NOV	D-4	IPR - Reconnaissance Report, Presentation	1				
	1-37	01 DEC			2			Recon Report, Presentation	
	1-38	04 DEC	D-5	Briefings	1				
	1-39	07 DEC			2				