CE 474 – Fall 2015 Exam #1 Preparation

Chapter/Activity	Skills/Abilities
2/A8	 Represent traffic flow on one approach using flow profile diagram, cumulative vehicle diagram, and queue accumulation. Construct and interpret diagrams based on theory and field data. Define terms: arrival flow, departure flow, saturation flow
3/A13	 Define terms: phase and movement, concurrency group, conflict matrix, ring Construct and interpret ring barrier diagrams for various conditions
4/A17	 Define process: gap out, max out Describe timing process: minimum green timer, maximum green timer, passage timer Construct and interpret traffic control process diagram
6/A30 6/A36	 Define terms: maximum allowable headway, occupancy time, unoccupancy time Interpret relationships: h = t_o + t_u t_u = h - L_d + L_v Concept: choosing passage time from given data Concept: relationship between passage time and detection zone length Describe phase termination analysis Set passage time based on phase termination analysis
7/A39	Interpret and apply relationship between maximum green time, cycle length, and delay (figures 139-143)
8/A45	 Describe various left turn phasing options Construct and interpret flow profile diagram and queue accumulation polygon for left turn options Construct and interpret ring barrier diagrams for various left turn options
9/A52 9/A54 9/A55	 Define terms: change interval, clearance interval Interpret choice point diagrams Interpret field data – stopping and not stopping on yellow display