

1.10s: Modeling and Simulation of Transportation Networks

July 28 – August 1, 2014 (Draft July 17)

MIT Room 3-370	Monday July 28	Tuesday July 29	Wednesday July 30	Thursday July 31	Friday August 1
Lecture 1 9:30 – 11:00	Introduction; Traffic Performance I: Modeling and Simulation Approaches (Ben-Akiva)	Demand and User Behavior I: Overview of Discrete Choice Analysis (Ben-Akiva)	Traffic Assignment I: Framework for Demand/Supply Interactions (Cascetta)	Public Transportation Models I: Framework and Low Frequency Services (Cascetta)	Real-time Systems: Evaluations of Traffic Predictions (Koutsopoulos)
Lecture 2 11:15 – 12:45	Traffic Performance II: Macroscopic Traffic Models and Introduction to Traffic Simulation (Coppola)	Demand and User Behavior II: Route and Time-of-Travel Choice (Ben-Akiva)	Traffic Assignment II: Equilibrium and Day-to-Day Dynamics (Cascetta)	Public Transportation Models II: High Frequency Services (Coppola)	Calibration and Validation I: Estimation of Origin to Destination Flows from Counts (Cascetta)
Lecture 3 1:45 – 3:15	Traffic Performance III: Microscopic and Mesoscopic Traffic Simulation (Ben-Akiva)	Demand and User Behavior III: Activity-Based Models (Ben-Akiva)	Traffic Assignment III: Testing Optimization Algorithms (Mahmassani)	Freight Models I: Economic Activity Models (Cascetta)	Calibration and Validation II: Estimation of Behavioral Models, Simultaneous Calibration (Ben-Akiva)
Lecture 4 3:30 – 5:00	Traffic Performance IV: Static and Dynamic Network Supply Models (Cascetta)	Demand and User Behavior IV: Integrated Land use and Transportation Models (Coppola)	Traffic Assignment IV: Pricing and Travel Time Reliability (Mahmassani)	Freight Models II: Logistics Choices (Ben-Akiva)	Conclusion; Questions & Answers (Ben-Akiva)
	<i>WELCOME RECEPTION</i> 5:15 – 7:00 PM Spofford Room 1-236			<i>BANQUET</i> 6:30 – 9:00 PM Royal East	