

CE 578 Highway Traffic Operations

Instructor

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Spring Semester 2015

Class time: Tuesday and Thursday 9:30 am – 10:45 am
Class location: EP 110
Instructor's office hours: M, T, W 11:00 –12:00.
Or you can email me and I will set aside time.

Course Description

Theory of two-lane highway and freeway operations, application of traffic simulation models for the design and operations of highway, development and assessment of freeway management and control strategies including Intelligent Transportation Systems applications, field data collection and analysis.

Class Materials and Website

The syllabus and all class materials are subject to change until the instructor indicates otherwise.
<http://www.webpages.uidaho.edu/~mlowry/Teaching/syllabus.ce578.pdf>

Required Textbook

Highway Capacity Manual 2010, Transportation Research Board. <http://hcm.trb.org/>

Homework and Grading Criteria

Grades are posted on <https://bblearn.uidaho.edu/> and will be assigned according to the following criteria:

Participation in class or my office	5	points	2%	Summary Paper and Presentation.pdf
6 Homeworks	120	points	42%	HW 1. Freeway Segments.pdf
Summary Paper and Presentation	40	points	14%	HW 2. Freeway Weaving and Ramps.pdf
2 Exams	120	points	42%	HW 3. Two Lane Highways.pdf
<i>Total possible</i>	285	points		HW 4. Urban Street Part 1.pdf
				HW 5. Urban Street Part 2.pdf
				HW 6. Investment Decision-making.pdf

Schedule

Start Date	Week	Topic	Reading
20-Jan	Week 1	Introduction	HCM 1-3
27-Jan	Week 2	Freeway Segments	HCM 11
3-Feb	Week 3	Freeway Segments	HCM 4
10-Feb	Week 4	Freeway Weaving	HCM 12
17-Feb	Week 5	Freeway Ramps	HCM 13
24-Feb	Week 6	Two-Lane Highways	HCM 15
3-Mar	Week 7	Two-Lane Highways	HCM 15
10-Mar	Week 8	Review and Exam	HCM 8
17-Mar	<i>Spring Break</i>		
24-Mar	Week 9	Urban Streets	HCM 17
31-Mar	Week 10	Urban Streets	HCM 17
7-Apr	Week 11	Urban Streets	HCM 16
14-Apr	Week 12	Investment Decisions	Handout Ch. 1
21-Apr	Week 13	Supply and Demand	Handout Ch. 3&4
28-Apr	Week 14	Costs and Benefits	Handout Ch. 5
5-May	Week 15	Review and Exam	Review