Travel Demand Forecasting

Instructor

Dr. Mike Lowry, PE Engineering Physics Building, EPB 115H 208-885-0139

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Class Location and Meeting Times

Class time: Tuesdays and Thursdays 9:30 am – 10:45 am

Class location: McClure Hall 315

Instructor's office hours: M, Th, F 11:00 – 12:00 Or you can email me and I will set aside time.

Course Description and Learning Objectives

Concepts and methods of travel demand forecasting and systems evaluation of multi-modal transportation. 3 credits, prerequisite: permission from the instructor.

A successful student will be able to:

- Describe and model travel behavior (activity choice, destination choice, mode choice, and route choice).
- Explain how travel behavior is influenced by urban form (density, diversity, and design).
- Calculate the expected change in travel demand using elasticity equations.
- Forecast travel demand for different travel modes using the Four Step Model.

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

Required Textbook

TBA

Schedule

TBA

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Participation 2% Assignments 35% Reading Quizzes 13% Exams 50%

Handouts and Supplemental Material

Learning Objectives

Part 1 Learning Objectives.pdf

Part_2_Learning_Objectives.pdf

Part 3 Learning Objectives.pdf

Handouts

Moscow's Zoning Map.pdf

Moscow's AADT Map.pdf

Traffic Calming Examples.pdf

Trip Generation Manual General Office 710.pdf

Transportation Lobbyists and Advocacy Groups.pdf

Fundamentals of Engineering Exam

FE Review Capacity and Planning.pdf

FE Transportation Equations.pdf

Travel Diary

NHTS2017 Recruitment Letter and Survey.pdf

NHTS2017 TravelLog 3Days.pdf

Travel Demand Forecasting

GIS Data

GIS Introduction.pdf GIS Geoprocessing.pdf ITD ArcGIS Online.pdf

Moscow GIS Data.zip Moab GIS Data.zip

Bike Ped Transportation

WABSA Description.pdf WABSA Bicycle Suitability Assessment Form.pdf WABSA Walking Suitability Assessment Form.pdf

HCM BLOS Description.pdf HCM Method Ped&Bike.pdf

LTS Description.pdf LTS Method Bike.pdf

AARP Walk Audit Description.pdf AARP Walk Audit Worksheet.pdf

Transportation Impact Study

ITD Transportation Impact Study Requirements.pdf

Travel Demand Modeling

Four Step Model GIS Example Moab.pdf Four Step Model GIS Toolbox.zip

Example Plans, Programs, and Study Reports

Example Plans Programs Reports.zip

Travel Demand Forecasting

Student Conduct and Policies

Each student is expected to assist in maintaining a classroom environment that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class.

- **Attendance.** Attendance at all course activities is expected. Missing more than one class period is considered excessive. You are expected to arrive to class on time.
- **Deadlines**. Assignments must be turned in by the due date and time unless prior arrangements have been made. I will <u>not</u> accept late assignments or exam rescheduling without documentation from the Dean of Students or a medical professional. Requests for exam rescheduling must be made prior to the day of the exam.
- Extra or Alternative Credit. I will <u>not</u> accept extra or alternative work to replace assignments or improve grades.
- **Classroom Engagement.** Use of personal phones, music players, tablets, iStuff, etc. is not permitted in class. This includes texting. Please place your ringer on silent before entering class. Reading or working on other materials while in this class is strongly discouraged.
- **Student Conduct**: All students are expected to honor the UI Student Code of Conduct. Violations include, but are not limited to: copying homework assignments completed by others, plagiarism, and cheating. Please be aware that any violation of the UI Student Code of Conduct may result in a course grade of "F". http://www.uidaho.edu/DOS/judicialaffairs/studentcodeofconduct
- **Plagiarism**: Plagiarism occurs when you use but do not cite someone else's work, even if it is re-worded, or by not indicating that a passage (paragraph, sentence, or even a small part of sentence) is directly quoted even if the reference is cited. Following the structure or organization of someone else's work is also plagiarism. Students caught plagiarizing will be given a grade of "F".
- **Cheating**. Using assignments, projects, or exams from previous semesters to study for exams, to help complete your assignments, or for any other purpose whatsoever is strictly prohibited. Violators will be failed.

University of Idaho Classroom Learning Civility Clause

It is expected that everyone in this course will be treated with mutual respect and civility, with an understanding that all of us (students, instructors, professors, guests, and teaching assistants) will be respectful and civil to one another in discussion, in action, in teaching, and in learning. Should you feel our classroom interactions do not reflect an environment of civility and respect, you are encouraged to meet with your instructor during office hours to discuss your concern. Additional resources for expression of concern or requesting support include the Dean of Students office and staff (885-6757), the UI Counseling & Testing Center's confidential services (5-6716), or the UI Office of Human Rights, Access, & Inclusion (885-4285).

Disability Support Services

If you believe that you require disability-related academic adjustments for this class (including pregnancy-related disabilities), please contact Center for Disability Access and Resources (CDAR) to discuss eligibility. A current accommodation letter from CDAR is required before any modifications, above and beyond what is otherwise available for all other students in this class will be provided. Please be advised that disability-related academic adjustments are not retroactive. CDAR is located at the Bruce Pitman Building, Suite 127. Phone is 208-885-6307 and e-mail is cdar@uidaho.edu. For a complete listing of services and current business hours visit https://www.uidaho.edu/cdar