

Department of Economics  
University of Colorado at Boulder

Jonathan Hughes  
jonathan.e.hughes@colorado.edu  
Office: Economics 4E

---

ECON 4555  
Transportation Economics  
FALL 2012  
MWF 9:00-9:50, MUEN E431

---

discusses: the key findings of the paper; major assumptions or limitations of the analysis; issues of relevance for policymaking. I will randomly select several of these summaries during the semester to evaluate as part of your class participation grade.

\* Denote readings in the course schedule for which you are to turn in an executive summary.

#### Grading:

15% Class participation

25% Problem sets

30% Midterm exam

30% Final exam

#### Problem Sets and Empirical Exercises

Throughout the course students will be assigned problem sets that represent a mix of theoretical and empirical work. For empirical exercises, we will be using data from recent studies and published government reports. The class will meet in a campus computer cluster to begin these exercises, though students may be expected to complete these exercises outside of class. An important goal of this course is to expose students to the data sources used to analyze transportation markets and policies. Due dates are listed on the course syllabus.

#### Examinations:

There will be an in class midterm exam on Wednesday October 24, 2012 and a final exam on Monday December 17, 2012 from 1:30 to 4:00 pm.

#### Late Assignments and Missed Examinations:

Problem sets and other assignments are due before the start of class on the date due. No late assignments will be accepted except in the case of documented medical or family emergency. No makeup exams will be given. If you foresee a conflict, contact me as soon as possible in order to make alternate arrangements for you to complete the requirements of this course.

**Lecture Notes** My lectures will make use of both the chalkboard and Powerpoint. The lecture slides and graphs can be downloaded from the class web site, available on Blackboard. Please visit this class website often.

**Campus Policies:** I will adhere to all campus policies with respect to disabilities, religious

## Tentative Course Outline

Week 1: Overview: transportation markets, energy and the environment

August 27 Lecture 1 Introduction- course goals, thinking like an economist

August 29 Lecture 2. Market for driving

August 31 Lecture 3. Computer Lab KTCH 117. Introduction to empirical analysis

Problem Set 1 Distributed

Week 2: Aggregate demand for transportation

September 3 Labor Day Holiday No class

September 5 Lecture 4. Gasoline demand

Hughes, Knittel and Sperling Evidence of a Shift in the Short-Run

Price Elasticity of Gasoline Demand. O (2008).

September 7 Lecture 5. Gas prices, fuel economy and vehicle choice

Busse, Knittel and Zettler Are Consumers Myopic? Evidence from New and Used Car Purchases (2012).

Problem Set 1 Due

Week 3: Environmental economics review

September 10 Lecture 6. Measures of value, measures of waste, efficiency

September 12 Lecture 7. Externalities, marginal private and marginal abatement cost

September 14 Lecture 8. Policies for addressing externalities

Problem Set 2 Distributed

Week 4: Costs of driving

September 17 Lecture 9. Driving related externalities

: \*Parry, Walls and Harrington

Week 6: Costs of driving continued

October 1 Lecture 15. Carbon trading

: TBD

October 3 Lecture 16. Low Carbon Fuel Standards

Holland et. al. "Some Inconvenient Truths About Climate Change Policy: The Distributional Impacts of Transportation Policies" (2011).

October 5 Lecture 17. Renewable fuel standards

Problem Set 3 Due

Week 7: Costs of driving continued

October 8 Lecture 18. Biofuels

: \*Anderson "The Demand for Ethanol as a Gasoline Substitute" (2011).

October 10 Lecture 19. Fuel economy standards

"Essays" Chapter 8 Jacobson

November 2 Lecture 28. Vehicle choice  
Problem Set 5 Due

Week 12: Public transportation

November 5 Lecture 29. Public transportation  
Essays Chapter 11

November 7 Lecture 30. Should transit be subsidized?

\* Rose, O. The Incidence of Regulatory Rents in the Motor Carrier Industry (1985)  
December 12 Lecture 42. Railroad deregulation  
Wilson, O. Market-Specific Effects of Rail Deregulation (1994)  
December 14 Lecture 43. Catch