Jonathan Hughes jonathan.e.hughes@colorado.edu Office: Economics 102

ECON 4555 Transportation Economics FALL 2017 MWF 11:00-11:50, ECON 119

COURSE SYLLABUS

Overview:

This is a course in transportation economics and policy for undergraduates. Students will learn how to use economic theory and empirical tools to analyze transportation markets and policies. The course combines topics from environmental economics and industrial organization including: aggregate demand for transportation; disaggregate demand and mode choice; externalities and the costs of driving; and policy instruments such as fuel taxes, the corporate average fuel economy program (CAFE), low carbon fuel standards and congestion pricing. Instruction will emphasize the current literature and examples from recent policies.

Office Hours and Contact Information:

Professor: Jonathan Hughes
Office location: Economics 102

Office hours: Mondays and Wednesdays from 9:30am-11am (or by appointment)

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Email: jonathan.e.hughes@colorado.edu

Class web site: D2Learn

Recommended Texts:

There is no required textbook for this course. However, much of the material for the course will drawn from the text below. Readings from the text are denoted as "Essays" in the course syllabus.

Essays in Transportation Economics and Policy: A Handbook in Honor of John R. Meyer, by Gomez-Ibanez, Tye, and Winston, 1999, The Brookings Institution.

Copies are on reserve at Norlin Library. The text is also available as an ebook from the CU NetLibrary (see Chinook catalog) and for purchase online.

Reading/Class Participation:

Throughout the course I will assign readings to supplement the lecture material. Readings noted in the syllabus can be found on the web.

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

Attendance:

Class attendance is required and I will take attendance daily. Each missed class will result in a one percentage point deduction from your final grade. There are no excused or unexcused absences. However, if you miss class, you may turn in a one-page summary of the material covered in class that day to receive full credit for the day's attendance. Summaries are due at the beginning of next class for which you are present.

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

Grading:

15% Reading & 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 theory and empirical work. For empirical exercises, we will be using data from recent studies and published

Tentative Course Outline:

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

August 28. Introduction - course goals, thinking like an economist

August 30. Market for driving

September 1. Gasoline demand

Reading: *Hughes, Knittel and Sperling. "Evidence of a Shift in the Short-Run Price Elasticity of Gasoline Demand." Energy Journal (2008).

Week 2: Aggregate demand for transportation

September 4. Labor Day – No Class

September 6. Introduction to empirical analysis

Reading: "What is econometrics"

September 8. Computer Lab BESC 385.

Problem Set 1 Distributed

Week 3: Environmental economics review

September 11. Measures of value, measures of waste, efficiency

September 13. Externalities, marginal private and marginal social cost

September 15. Reading: *Busse, Knittel and Zettelmeyer. "Are Consumers Myopic? Evidence from New and Used Car Purchases" American Economic Review (2012). *Problem Set 1 Due*

Week 4: Costs of driving

September 18. Driving-related externalities

Reading: *Parry, Walls and Harrington. "Automobile Externalities and Policies" Resources for the Future (2007).

September 20. Finding the "Right" Gasoline Tax

September 22. Computer Lab BESC 385. Air pollution

Reading: "Essays" Chapter 7

Problem Set 2 Distributed

Week 5: Costs of driving

September 25. Air pollution cont.

Reading: *Kellogg and Auffhammer. "Clearing the Air: Effect of Gasoline Content Regulations on Air Quality" American Economic Review (2011).

September 27. Unintended consequences of clean fuel regulation

Reading: *Brown et. al. "Reformulating Competition" Journal of Environmental Economics and Management (2008).

September 29. Climate change

Reading: IPCC 4th AR Summary for Policymakers

Problem Set 2 Due

Week 6: Costs of driving – continued

October 2. Carbon trading

Reading: TBD

October 4. Low Carbon Fuel Standards

Reading: *Holland et. al. "

Reading: *Parry and Small. "Should Urban Transit Subsidies be Reduced?" American Economic Review (2009).

November 10. Public transportation cont.

Problem Set 5 Due

Week 12: The firm and market power review

November 13. Monopoly (inc. price discrimination)

November 15. Oligopoly and firm interaction

November 17. Oligopoly and firm interaction

Problem Set 6 Distributed

Fall Break November 20 - November 24

Week 13: Freight transport

November 27. Economies of density and network size

Reading: "Essays" Chapter 3

November 29. Railroad deregulation

Reading: *Bitzen and Keeler. "Economies of Density and Regulatory Change in the U.S. Railroad Freight Industry" Journal of Law and Economics (2007).

December 1. Network industries.

Problem Set 6 Due

Week 14: Air travel

December 4. Market power in air travel

Reading: *Borenstein. "Hubs and High Fares" RAND Journal of Economics (1989).

December 6. Entry and competition in air travel

Reading: *Goolsbee and Syverson. "Do Incumbents Respond to Threat of Entry?" Quarterly Journal of Economics (2008).

December 8. Computer Lab BESC 385. Price discrimination.

Reading: * Stavins. "Price Discrimination in the Airline Market" The Review of Economics and Statistics (2001).

Problem Set 7 Distributed

Week 15: Deregulation

December 11. Trucking deregulation

Reading: *Rose "The Incidence of Regulatory Rents in the Motor Carrier Industry" RAND Journal of Economics (1985).

December 13. Railroad deregulation

Reading: *Wilson. "Market-Specific Effects of Rail Deregulation" Journal of Industrial Economics (1994).

December 15. Catch-up and review

Problem Set 7 Due

December 19. Final Exam 4:30pm – 7:00pm