



UNIVERSITY OF  
CALGARY

## Department of Economics Faculty of Arts

### Economics 371 (L01) (Economics of Transportation)

Instructor: WALLS, W. D.  
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Lecture Location: AD 140  
Lecture Days/Time: TR 12:30PM—1:45PM

Office: SS 332  
Office Hours: TR 11:00AM—12:00PM or by appt. only. (Winter 2022)  
(Office Hours by Zoom Only through link on D2L)

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#### Course Description:

This course focuses on the economic and empirical analysis of the transportation industries. Conceptual topics include the demand for transport, analysis of direct and external costs, pricing and investment, competition and regulation. Within this conceptual framework, the course focuses on urban and intercity transportation, passenger and freight transportation, domestic and international transport markets, and the various modes of transportation.

#### Course Learning Outcomes:

Students who successfully complete this course will:

- a) develop familiarity with sources of transportation industry data and introduced to collecting, collating, and summarizing transportation data for the purpose of understanding transportation markets.
- b) develop familiarity with transportation and location, including Weber's conceptualization of the importance of transportation cost on industrial location, the importance of transportation cost on rent gradients, the importance of transportation cost in determining geographic market areas in a Loschian model of spatial competition (Capozza and Van Order, 1978).
- c) develop familiarity with demand for freight transportation, including transport demand being derived from the demand for the underlying commodity for freight transportation.
- d) develop familiarity with the demand for passenger transportation, including the value of travel time savings and the ways in which it can be quantified.
- e) develop familiarity with important cost concepts, including economies of scale, scope, density, length-of-haul, massed reserves, and economies of network size.
- f) develop familiarity with pricing in transportation, including class-of-service pricing, backhaul pricing, Ramsey pricing, peak-load pricing with and without a shifting peak.
- g) develop familiarity with congestion pricing in theory and evaluating the effects of congestion pricing in practice.
- h) develop familiarity with the evaluation of transportation infrastructure investment.
- i) develop familiarity with the economic regulation of transportation, and the economic effects of the surface and air transport deregulation.
- j) develop familiarity with the role of transportation in economic development.
- k) develop the skills necessary for the critical evaluation of news stories about transportation sector.
- l) be able to produce a twelve-page written report on a petroleum markets topic that combines conceptual economic ideas (at the level of Econ 201), market institutions, and simple descriptive empirical analysis.

**Course Outline:**

- a) Transportation industry data and statistics.
- b) Transportation and location.
- c) Demand for transportation.
- d) Value of travel time savings.
- e) Costs of transportation: scale, scope, density, length-of-haul.
- f) Network economies and massed reserves.
- g) Pricing transportation: backhaul pricing, classes of service, second best, congestion pricing.
- h) Congestion/Road pricing: Theory and practice.
- i) Infrastructure investment and project evaluation.
- j) Regulation and deregulation: Concepts and empirical evidence.
- k) Transportation and development.

**Prerequisites/corequisites:**

**Econ 201, 203.**

**Required Textbook(s):**

Button, Kenneth. *Transport Economics*. Third Edition. Edward Elgar, 2010.

**Recommended Textbook(s):**

Mohring, Herbert. *Transportation Economics*. Ballinger, 1976.

**Books on Reserve:**

- a) Boyer, Kenneth. *Principles of Transportation Economics*. Addison-Wesley, 1998.
- b) Button, Kenneth. *Transport Economics*. Edward. Elgar, third edition, 2010.
- c) Button, Kenneth John. *Recent developments in transport economics*. Edward. Elgar, 2003.
- d) Crandall, Robert W. *Regulating the automobile*. Brookings Institution, 1986.
- e) José A. Gómez-Ibáñez, William B. Tye, Clifford Winston, editors. *Essays in transportation economics and policy : a handbook in honor of John R. Meyer*. Washington : Brookings Institution Press, 1999.
- f) McCarthy, Patrick. *Transportation Economics: Theory and practice*. Blackwell, 2001.
- g) Meyer, John Robert and Clinton V. Oster, Jr. *Deregulation and the future of intercity passenger travel*. MIT Press, 1987.
- h) Morrison, Steven A and Winston, Clifford. *The economic effects of airline deregulation*. Brookings Institution, 1986.
- i) Morrison, Steven A and Winston, Clifford. *The Evolution of the Airline Industry*. Brookings Institution, 1995.
- j) Oum, Tae, and J. Dodgson, D. Hensher, S. Morrison, C. Nash, K. Small, and W.G. Waters, editors. *Transport Economics: Selected Readings*. Harwood Academic Publishers, 1997.
- k) Small, Kenneth and Verhoef, Erik. *Economics of Urban Transportation*. Routledge, 2007.
- l) Small, Kenneth, and C. Winston and C. Evans. *Road Work*. Brookings Institution Press, 1989.
- m) Thompson, Elaine. *Cold temperature asphalt pavement cracking in Canada : compendium*. Polyscience Publications, 2001.
- n) Winston, Clifford. *Alternate route: Toward efficient urban transportation*. Brookings Institution Press, 1998.
- o) Winston, C., and T Corsi, C. Grimm and C. Evans. *Surface Freight Deregulation*. Brookings Institution Press, 1990.

**Desire2Learn:**

This course will make use of the Desire2Learn (D2L) platform. Students who are registered in the course can log on at <http://d2l.ucalgary.ca> through their student centre. Please note that D2L features a class e-mail list that may be used to distribute course-related information. These e-mails go to your University of Calgary e-mail addresses only.

**The Written Term Paper and the Video Presentation of Term Paper must be submitted by each student to the D2L Dropbox by the 11:59PM on Tuesday April 12<sup>th</sup> (the last day of instruction in Winter 2022).**

**Grade Determination and Final Examination Details:**

The grade will be comprised of three in-class quizzes, a written term paper, a video presentation of the term paper, and the final examination as follows:

In-class Quizzes (3 @ 15% each)	45%
Written Term Paper	25%
Video Presentation of Term Paper	05%
Final Examination (comprehensive)	25%

**Given the potential impacts on student workload and wellbeing, I have shifted the timed assessment for Quiz #1 to be held after reading week in an in-person format during class time, making the changes to the course outline below.**

**Quiz dates are ~~Thursday February 3rd~~ Thursday March 3rd, Thursday March 10<sup>th</sup>, and Thursday April 7<sup>th</sup>.**

**The Written Term Paper and the Video Presentation of Term Paper must be submitted by each student to the D2L Dropbox by the 11:59PM on Tuesday April 12<sup>th</sup> (the last day of instruction in Winter 2022).**

The official university grading system will be used. See <http://www.ucalgary.ca/pubs/calendar/current/f-1-1.html>.

Students must receive a passing grade on the **final exam, the written term paper, and the video presentation of term paper** to pass the course.

If a student's letter grade on the final exam exceeds their midterm(s) letter grade, the weight of the midterm(s) is (are) transferred to the final exam at the discretion of the instructor. The student must have written the midterm(s) or provided supporting documentation for the absence(s) such as a medical note or statutory declaration.

As per the Writing Across the Curriculum Statement in the Calendar, writing and grading thereof will be a factor in the evaluation of student work. See <https://www.ucalgary.ca/pubs/calendar/current/e-2.html>.

Course material dealing with a particular assignment will typically be covered in class at least 2 days before the assignment is due; thus, assignments can be completed at any time up to and including the due date. Given these factors, only situations where someone can document illness or domestic affliction for an extended period (i.e., the entire 2 days prior to the due date) would possibly warrant

shifting the assignment weight to the final exam. Furthermore, technical problems can be expected to occur with computer systems (and internet availability) so it may be a good idea to not wait until the last minute to submit your assignment.

Any student work which remains undistributed after the last day of classes will be available to students through the instructor's office during the instructor's office hours for a period of one month.

The final examination will be comprehensive, scheduled by the Registrar, held in a classroom, and last 2 hours. If a student cannot write their final exam on the date assigned by the Registrar's Office, they need to apply for a deferred exam <https://www.ucalgary.ca/pubs/calendar/current/g-6.html>. Under no circumstance will this be accommodated by the Department.

Tests and exams **WILL NOT** involve multiple choice questions .

Programmable calculators, cellphones, textbooks, course notes, and other electronic devices will not be allowed during the writing of tests or final examinations. Students are reminded that simply being able to access a cellphone during an exam is academic misconduct.

The exact date for the in-class tests has been noted above directly below the composition of grading criteria.

THERE WILL BE NO MAKEUP OR DEFERRED QUIZZES/TESTS/EXAMS under any circumstances, nor may the quizzes/tests/exams be written early. Students unable to write the quizzes/tests/exams because of documented illness, family emergency, religious observance, or university-sanctioned event will have the weight shifted to the final examination; otherwise a grade of zero will be assigned.

**Reappraisal of Grades:**

*For Reappraisal of Graded Term Work, see Calendar I.2*

<http://www.ucalgary.ca/pubs/calendar/current/i-2.html>

*For Reappraisal of Final Grade, see Calendar I.3*

<http://www.ucalgary.ca/pubs/calendar/current/i-3.html>

**Academic Misconduct:**

Academic Misconduct refers to student behavior that compromises proper assessment of students' academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.

Student committing academic misconduct during the final exam will not receive a passing grade for the course.

For information on the Student Academic Misconduct Policy, Procedure and Academic Integrity, please visit: <https://www.ucalgary.ca/pubs/calendar/current/k-3.html>

**Academic Accommodations:**

Students seeking an accommodation based on disability or medical concerns should contact Student Accessibility Services. SAS will process the request and issue letters of accommodation to instructors. Students who require an accommodation in relation to their coursework based on a protected ground

other than disability should communicate this need in writing to their instructor. The full policy on Student Accommodations is available at

<https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure>

**Freedom of Information and Protection of Privacy (FOIP) Act:**

Personal information is collected in accordance with FOIP. Assignments can only be returned to the student and will be accessible only to authorized faculty and staff. For more information, see <https://www.ucalgary.ca/legal-services/access-information-privacy>

**Copyright Legislation:**

See the University of Calgary policy on Acceptable Use of Material Protected by Copyright at <https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy> Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy.

Course materials created by instructors (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may NOT be reproduced, redistributed or copied without the explicit consent of the instructor. The posting of course materials to third party websites such as note-sharing sites without permission is prohibited. Sharing of extracts of these course materials with other students enrolled in the course at the same time may be allowed under fair dealing.

**Recording of Lectures:**

Recording of lectures is prohibited, except for audio recordings authorized as an accommodation by SAS or an audio recording for individual private study and only with the written permission of the instructor. Any unauthorized electronic or mechanical recording of lectures, their transcription, copying, or distribution, constitutes academic misconduct. See <https://www.ucalgary.ca/pubs/calendar/current/e-6.html>.

**Important Dates:**

Please check: <http://www.ucalgary.ca/pubs/calendar/current/academic-schedule.html>.

**Student Organizations:**

Faculty of Arts Students' Association (F.A.S.A.):  
Economics Department Representative  
E-mail: [econrep@fasaucalgary.ca](mailto:econrep@fasaucalgary.ca)  
Website: [www.fasaucalgary.ca](http://www.fasaucalgary.ca).

Society of Undergraduates in Economics: <https://www.ucalgarysue.com/>.

Society of Undergraduates in Economics is a student run organization whose main purpose is to assist undergraduate economics students to succeed both academically and socially at the University of Calgary. Services include access to the exam bank, career events such as Industry Night and information sessions, mentorship programs, and social events for members. They invite you to join by contacting SUE at [societyofundergradsineconomics@gmail.com](mailto:societyofundergradsineconomics@gmail.com).

**Faculty of Arts Program Advising and Student Information Resources:**

- Have a question, but not sure where to start? The Arts Students' Centre is your information resource for everything in Arts! Drop in at SS102, call them at 403-220-3580, or email them at [artsads@ucalgary.ca](mailto:artsads@ucalgary.ca). You can also visit the Faculty of Arts website at

<http://arts.ucalgary.ca/undergraduate>, which has detailed information on common academic concerns, including program planning and advice.

- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 403-210-ROCK [7625] or visit them in the MacKimmie Tower.

**Student Support and Resources:**

- See <https://www.ucalgary.ca/registrar/registration/course-outlines> for information on campus mental health resources, the Student Ombuds Office, Student Success Centre, Safewalk, and Emergency Evacuation and Assembly.
- Online writing resources are available at <https://ucalgary.ca/student-services/student-success/writing-support>.

**Notes:**

1. Students are responsible for all assigned material, e.g., supplementary material posted on D2L, regardless of whether or not the material was covered in class.
2. Please note all of the above material applies to all students, except none of the above.

WDW

2021-11-16