Department of Geography Geography 425: Geography of Transportation

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Office Location: GU 229

Office Hours: 8:00-8:50 a.m. M, 11:00 – 11:50 noon MW, 10:45-11.45 a.m. TR or by

appointment

Lecture Hours: TR: 2:00 – 3.15 pm

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Course Description

The linkages and flows of goods, services, and people from area to area. The influence of various transportation modes in the historical development of regions; the role of transportation planning in shaping future metropolitan and regional settlements.

Course Objectives

- 1. Introduce students to urban and rural transportation issues.
- 2. Introduce students to the theory, planning, and methods of analyzing transportation problems.
- 3. Examine institutional policies in transportation management.
- 4. Provide a practical understanding to travel patterns and behavior.
- 5. Examine the evolution of transportation in developing and developed countries.

Learning objectives

By the end of the class students will have to demonstrate the following

- 1. An understanding of the major theories of transportation geography.
- 2. Ability to distinguish between the nature, problems and prospects of transportation in the rural and urban centers.
- 3. A framework of transportation planning.
- 4. Demonstrate an understanding of travel patterns and behavior.
- 5. Write research paper on transportation geography.
- 6. The social and environmental impacts of transportation.
- 7. The understanding of transportation policy including deregulation.

Required Text

Jean-Paul Rodrigue, Claude Comtois, and Brian Slack. 2006. The Geography of Transport Systems. New York. Routledge.

Academic Dishonesty

Note that academic dishonesty including plagiarism and cheating during examination is a serious offense and carries severe penalty. Refer to the *Pathfinder* for details. You automatically earn F grade if you are involved in academic irregularity.

Disruptive Student Behavior

Please refer to the *Pathfinder* for details.

Blackboard

To facilitate effective communication between the instructor and students, the course is available on Blackboard site. You are encouraged to visit the site regularly to check on announcements and deadlines. Course syllabus and assignments are also posted on the site. You can also check your grades including unofficial class average from the grade book. For those not familiar with Blackboard, information will be provided in class.

Policy

Students are expected to attend classes regularly and participate actively during class discussions. To participate actively in class, students are required to read assigned materials prior to class. It is your responsibility to follow the syllabus carefully and read required materials before class.

Attendance will be recorded and failure to attend classes will result in loss of points. Your attendance grade will be based on the total number of days present over the expected number of days multiplied by 20. For example, if you were required to be in class for 24 days in the semester, and you were present for 24 days, your attendance grade will be (24/24)x20 = 20 points. Students are responsible for informing the instructor of their presence if they arrive after attendance has been taken.

Class assignments and term essays are to be submitted promptly on the due day. Late submission of term essays and assignments carry a penalty of 20 points per day for a maximum of 5 days. No essays and assignments will be accepted after the 5th day without a reasonable cause. A reasonable cause is defined as serious illness (doctor's report required) or tragedy within the family (a note from family member required).

Cell phones and pagers

Cell phones and pagers should be turned off when you come to class. Answering cell phones or checking text messages in class is disrespectful to me and your fellow students. Exception is given to a certified EMT or fire responder. Please inform me ahead of time if you need to have your beeper active all the time because of your profession or special circumstances.

Grading

All tests including the final examination will consist of short questions and essays. Prior approval is required for missing an examination. No make-up examination will be granted if you fail to seek prior approval.

If you need help with assignments and reading, ask early in the semester. Students will not have an opportunity for extra credit.

The final grade will consist of the following

Class attendance and participation	= 25 points
Class assignments (2) Due (Tuesday 2/10, Thursday 4/2)	= 100 points
Three unannounced quizzes (25 points each)	= 75 points
Annotated bibliography (Thursday 3/12)	= 50 points
Research paper (Thursday 4/30)	= 100 points
Test 1 (To be announced)	= 100 points
Test 2 (To be announced)	= 100 points
Final examination (Tuesday 5/12, 8:00 pm-10:30 pm)	= 100 points

Your final grade will be determined based on the total points accumulated over 650. The scale is as follows:

$$A = 90-100\%$$
, $B = 80-89\%$, $C = 70-79\%$, $D = 60-69\%$, $F < 60\%$

You are strongly encouraged to use office hours or set up an appointment to discuss your grades with me during the semester.

Ouiz:

There will be three unannounced quizzes. You need to read each day before you come to class. You will lose points for a quiz if you did not seek prior approval for class absence on the day a quiz is conducted.

Class Assignment

Each student is required to review and provide critical comments on the following readings. Personal comments about the articles are strongly recommended. The award of marks for the review will be determined by the quality of the review.

- 1. a. Research Agendas in Transport Geography for the 1990s' by Rchard D. Knowles, The Journal of Transport Geography, 1993 1:1 pages 3-10.
- b. William R. Black (2003) Chapter 1 of textbook: An introduction to transportation geography. Transportation: A Geographical Analysis. New York: The Guildford Press.

2. Jean-Paul Rodrigue. 2005. International Oil Transportation. Retrieved from http://people.hofstra.edu/geotrans/eng/ch5en/apple5en/ch5a1enhtml

Annotated Bibliography

Each student is required to use Research Port, an electronic information resource in the library to search for five journal or Internet articles on topics related to transportation geography. While it is recommended that your articles cover a variety of topics, you can also limit the five articles to one topic, i.e., all articles may be related to economic impact of transportation of urban transportation problems. Research Port may be accessed through http://researchport.umd.edu. You need to be a registered user of the Frostburg State University library in order to have access to Research Port.

Note: You can not repeat the articles you used for assignment 1.

Write an annotated bibliography on each of the articles and present hard copies of the articles and your work to me. This means that you have to print the articles and present them to me. An annotated bibliography represents the highlights of the article, that is, a summary of the article. Usually, an annotated bibliography is about two to three paragraphs long. If you are in doubt of how to write an annotated bibliography, consult handout given in class. You need to follow the format of writing an annotated bibliography as provided in class. This usually includes but not limited to:

Title in bold: Author: Publisher or organization: Date of publication: Key words:

The purpose of this assignment is to help you start thinking of your research project for the class. It will also help you to understand how to use Research Port and improve your writing skills.

Course outline and weekly reading (subject to change)

A. Background, Concepts and Transport Evolution

1. Introduction (Reading: Chapter 1 of text)

The basis and foundation of transportation geography, the importance of transportation, transport geography in the 1980s and 1990s, approaches to the study of transport geography.

2. Historical and contemporary issues of transportation (Reading: Chapter 1 Concept 3 of text book)

Transportation in the pre-industrial era (pre-1800s, the industrial revolution and transportation, emergence of modern transportation system (1870-1920), transportation in the Fordist era (1920-70), Post Fordist era (1970-)

3. Transport systems and networks (**Chapter of text**)

Transportation and commercial geography, transport costs, geography of transportation networks

4. The evolution of the United States transportation systems (Reading: Chapters 3 and 4 Taaffe, Gauthier and O'Kelly 1996, Transportation Geography and Spatial Organization, On reserve)

transportation and economic development, politics and U.S. transportation development, the four eras of U.S. transportation development.

B. Economic and Urban Transportation Issues

5. Economic and spatial structure of transport systems (Reading Chapter 3 of textbook)

Transport and economic development, transport and spatial organization, transport and location

6. Transportation modes (Reading Chapter 4 of textbook)

Diversity of modes, intermodal transportation, passengers or freight

7. Transport terminals (chapter 5 of textbook

Functions of transport terminals, Terminals and location, Terminals and security

- 8. Urban transportation (chapter 7 of textbook)
 Urban transportation problems, transportation and urban form, urban land-use and transportation, urban mobility, urban areas and transportation, modal choice, the urban transport problem
- 9. Urban transportation planning (Reading: Chapter 9, Concept 3 and "The urban transportation planning process" In: Hanson S. and Giuliano G. eds. The geography of urban transportation. 2004. New York: Guilford Press On reserve)

historical overview of transportation planning in the United States, the planning process, pre-analysis phase, technical analysis phase, modeling phase, post-analysis phase

C. Transportation Impacts

10. Transportation and land use (**Reading: Genevieve Giuliano 2004. "Land-use** impacts of transportation investments: Highway and Transit". In: Hanson S. and Giuliano G. eds. The geography of urban transportation. New York: Guilford Press. On Reserve).

Relationship between transportation and land-use, theoretical foundations of land use, approaches to analyzing land-use impact of transportation and transportation, transportation and land-use planning.

11. Transportation and the environment (Reading: Chapter 8 of textbook and Chang-Hee Christine Bae 2004. "Transportation and the environment". In: Hanson S. and Giuliano G. eds. The geography of urban transportation. New York: Guilford Press. On Reserve).

Impacts on humans, impact on vegetation, impact on animals, impact on soils, impact on water, impact on climate and the atmosphere. Relationship between transportation and pollution: types of pollution - noise, noise models, air, air quality models (effects of major pollutants on humans), heat islands, environmental impact statements and transportation

12. Transportation and the society

transport-deprived (mobility gaps, the poor, the disabled, the elderly, the young, women), accidents (who, where and how), reducing the toll (prevention and protection), risk compensation, improving road safety, transportation and health, advocates for highways and auto safety.

D. Policy Issues

13. Transport policy (Reading: Chapter 9 of textbook: Concepts 1 and 2)

Defining policy, why transport policy, policy instruments, policy process

14. The future of transportation: issues and challenges in transport geography (**Chapter 10 of text**)