COURSE OVERVIEW

This course explores contemporary multimodal transportation systems, policy, planning, and practice through a series of comparative international case studies, lectures, and class exercises. Case topics include innovative parking management in San Francisco, congestion charging in London, managing motorcycles in Indonesia, and Bus Rapid Transit in Bogota. By analyzing contemporary planning challenges and best practices, students will develop a better understanding of how the transportation system works and how to employ specific multimodal interventions and policies effectively.

The course emphasizes learning about contemporary transportation planning and policy issues through the case study method. This pedagogical tool requires students to prepare the case before class and engage actively in the classroom discussion. In most classroom cases, a manager or policy maker faces a difficult decision related to a contemporary transportation policy. In general, there is no right answer. Well-informed, intelligent people may come to different conclusions about the most effective way to proceed. Students will learn to process information quickly and hone effective arguments to support their position.

Throughout the course, I will put a special emphasis on the verbal and written communication of policy recommendations. This will include a memo-writing workshop and class exercises that ask students to quickly digest a transportation-related theme (such as a parking inventory analysis) and prepare a brief presentation that highlights recommendations and evidence to support that recommendation.

The first section of the course will focus on surface-based transportation planning and policy. The second section will explore specific topics related to public and non-motorized transportation.

COURSE REQUIREMENTS

This course has three primary assignments:

1) Two action memos responding to class case studies (25%);
2) Self/peer evaluations and participation (25%); and
3) Final exam or final project (50%).
You are required to come prepared and participate in all classes. This is particularly important for teaching cases. Effectively preparing a teaching case requires you to read the case at least twice, study the exhibits, and develop your arguments. One of the first day’s reading assignments details how to prepare a case effectively.

You will also give and receive regular written and verbal feedback on your classmates’ work. Given the participatory nature of this course’s work, it is important to prepare and submit your assignments on time. If for any reason you are having trouble keeping up with the course materials or assignments, please arrange a meeting with me.

**Plagiarism**

Do not plagiarize. If you have any questions about what constitutes plagiarism, please consult the University’s official policy for academic integrity. If you continue to have any questions, please come talk to me or send me an email.

**Memos (25%)**

You will write two *action* memos (roughly 500 to 1500 words) on any case that we discuss in the class, except for the Jakarta case. Memos will be due on Canvas by the end of day on the Friday after a case is discussed in class. You may submit your memos individually or in pairs.

One case must be from the first five weeks (up to the San Francisco parking case), the other from the remaining cases. Late submissions will not be accepted, nor will memos for a class that you do not attend. The memo should make clear and specific recommendations that respond to the question posed on the day of class and consider the opportunities and challenges presented in the cases. Be sure to organize your memo clearly with headings or other devices to effectively separate and highlight key ideas, use evidence from the case to support your argument, and use crisp jargon-free English. For guidance, refer to the course materials on writing an action memo in the Files section of Canvas.

**Participation and peer-evaluations (25%)**

You will be required to submit a self- and peer-evaluation form periodically throughout the semester. Each student will also fill self-evaluation forms that highlight strengths, areas for improvement, and goals for the remainder of the semester. These are due on March 1 and on April 26.

**Final Exam or Final Project (50%)**

Students may choose between a final exam and final project. The final exam will take place on the last scheduled course day and will require students to prepare a case like the ones we have prepared in class and respond to specific written questions about the case.

Alternatively, students may work in groups of 1 to 3 to prepare their own teaching case. I will provide additional details on preparing and writing a case study in class. In general, the content and style should follow the format of the cases that we review in class. This will require some primary research (likely interviews), data collection, and analysis.
Use an author-date format when referring to readings and include a bibliography. Here are links to the *Chicago* and *APA* manuals of styles.

**Grading**

For the final grade:
- an A indicates excellent work across all dimensions of all aspects of the course.
- a B indicates acceptable work.
- a C or below indicates insufficient or unacceptable work.

**Readings**

Throughout the course, we will rely on several cases, provided by Harvard Business Publishing. Pay special attention to preparing cases on days when we learn from a teaching case. To purchase the electronic or paper versions of the cases, please follow this link: [https://hbsp.harvard.edu/import/1019582](https://hbsp.harvard.edu/import/1019582)

Other readings are available online through Canvas. Where possible, I also provide hyperlinks to articles in the reading list. You will only be able to access them through a Penn-connected computer or through a [library proxy](https://hbsp.harvard.edu/import/1019582).

If for some reason a link is broken, you are still required to access the reading. I recommend using the Penn library or Google Scholar. I will also provide a list of additional readings that will help you learn more about a subject but are not required prior to class. You can find these through the Penn library or Google Scholar search and can use them to improve your understanding of a specific topic. I recommend reading at least one per case to familiarize yourself with the topic.
READING LIST AND CLASS SCHEDULE

Week 1 (January 18): Introduction and overview

Part A) Course overview

Part B) Learning from the case study

Part C) Traffic flow and passenger-car equivalents

Required Readings

Part I: Surface transportation

Week 2 (January 25)

A) Case: Jakarta’s Transportation Problems
Prep questions: What are the causes of congestion and how important are they? What are the pros and cons of reducing travel demand? Increasing road supply? Managing the existing supply?

B) Memo-writing breakout session

Additional Readings

Week 3 (February 1)

A) Memo writing workshop
B) Memo-evaluation breakout session (bring copy of Jakarta memo)

Week 4 (February 8)

A) Case: Congestion Charging in London: the Western Expansion
Prep questions: Is the original scheme a success? What are its strengths and weaknesses? What are the advantages and disadvantages of the western expansion? Would the London scheme work in Philadelphia?

B) Zonal congestion charge for Philadelphia exercise (bring laptops)

Additional Readings

Week 5 (February 15)

A) Case. Parking in San Francisco.
Prep questions: How should San Francisco address its parking problems? What is the relationship between on-street parking and minimum parking regulations? What should Philadelphia do about its parking problems?

B) Parking inventory exercise

Additional Readings
Part II: Public and Non-Motorized Transportation

Week 6 (February 22)

A) Case: Transmilenio: The Battle over Avenida Séptima
Prep questions: What were the successes and challenges of phases 1 & 2 of the Transmilenio? What additional challenges and opportunities does phase 3 present? What are the limitation of BRT as a transport policy?

B) Capacity calculations BRT and memo writing exercise

Additional Readings

Week 7 (March 1)

A) Case: SEPTA Capital Budget Crisis
Prep questions: How serious is SEPTA’s budget problem? What are the most important criteria for evaluating different funding options (equity, efficiency, political acceptability, etc.)? What are the relative merits of taxes and user fees?

B) SEPTA’s contemporary budget crisis exercise

Additional Readings
Self-assessment form due

Week 8 Spring Break (March 8) Spring Break

Week 9 (March 15)
A) Transit service planning exercise Part I
B) Guest lecture: Dan Nemiroff (SEPTA) on bus network redesign

Additional Readings

Week 10 (March 22)
Transit service planning exercise Part II

Week 11 (March 29)
Field trip: Federal Transit Administration (Philadelphia office) with Anthony Jreije

Additional Readings

Week 12 (April 5)
A) Case: California High-Speed Rail
Prep questions: What are the different markers for HSR? Are the demand forecasts reasonable? What assumptions are most problematic? What are the biggest barriers to implementation?
B) Northeast HSR forecast and memo-writing exercise

Additional Readings

Week 13 (April 12)

A) Introduction to Bicycle and Pedestrian Planning

B) Case: Bixi goes to New York
Prep questions: What are the strengths and weaknesses of Bixi as a bike-share provider? How important is the NYC contract to Bixi? Is Bixi ready to expand its area of operation to NYC?

Additional Readings
NCHRP project 15-37. 2010. AASHTO Guide for the Development of Bicycle Facilities, read Chapters 1 and 2 (pp 1-36), skim Chapters 4 and 5 (pp 55-195)
PennDesign Studio. 2016. CYCLE, QRO Promoting equitable bicycle planning in the Municipality of Queretaro, Mexico
Federal Highway Administration. 2002. Pedestrian Facilities Users Guide, Chapters 1 (pp 3-10) and 4-A (pp 41-50)

Week 14 (April 19)

Design Charrette: Intersection and Street Section Redesign
Aditya Inamdar, AICP, LEED AP
Urban Planner at Kittelson & Associates, Inc.

Week 15 (April 26)

Alumni panel and event

Self-assessment form due

Final Exam (Date TBD)

Case: Ho Chi Minh City
Prep questions to consider: What are the trade-offs between motorcycles and public transit from a user and public perspective? What would you have to do to achieve the 2025 transit mode share goals? Is your strategy likely to succeed?

Additional Readings