



## SYLLABUS

**Course Title: Sustainable Bicycle Transportation Field Seminar**

**Instructor: Marc Schlossberg**

**Language of Instruction: English**

**UO Credits: 8**

**Contact Hours\*: 80**

**Total Hours of Student Engagement (THSE) in all course activities\*: 220**

**Copenhagen (Denmark), Malmö (Sweden), Utrecht and Amsterdam (Netherlands)**

### **COURSE DESCRIPTION**

The program is an eight-credit, three and a half week traveling seminar in The Netherlands and Denmark (and a short trip to Sweden) to study bicycle planning, design, policy and culture as a sustainable and economically viable form of transportation. The course will focus on the practices and policies that foster safe, convenient and accessible bicycle infrastructure and the underlying culture that supports a high rate of bicycle use.

### **COURSE OBJECTIVES**

The purpose of this course is to give students the opportunity to explore the various elements involved in planning for increased utilization of bicycles as a form of urban transportation. This is not a design or engineering class, but one that looks at design and engineering, as well as culture, policy, education, history, and other elements that help create vibrant communities where bicycles are a primary mode of transportation for a large swath of the population. The class will consist of a combination of teaching and learning approaches, including the use of lectures, guest lectures by practitioners, in-class exercises, and out-of-class hands-on assignments.

Course objectives include:

- Understand the role of bicycling in urban transportation;
- Understand the role of policy and planning in shaping urban form and transportation choices;
- Understand the contribution of design, safety, and legal issues toward bicycle planning;

- Learn the critical components of successful integration and promotion of walking and bicycling into communities.

### INSTRUCTIONAL METHODOLOGY

This course is a combination of daily urban bike riding as locals would do combined with instructor and local expert lectures, self-paced activities designed to explore and understanding the bicycle transportation infrastructure, and select cultural excursions to take advantage of the locations where we will be based. We will frequently gather to debrief what we have seen to try to understand what works, why, and how might those things work in a U.S. context. This is not a classroom-based course; our classrooms are the cities we will be experiencing. A key part of the course is developing a close student community to enhance learning, create support for one another, and to develop a network that may carry into future professional careers.

### METHOD OF EVALUATION (GRADING)

	undergrad	grad
Field observation report (pre)	10%	10%
Diary / Journal (during)	60%	40%
Compiled Project (during & after)	30%	30%
Annotated Bib / Project Lead	---	20%

**The Field Observation Report** will be a report based on some bicycle count field work and observation you will be assigned to do. The assignment is to:

1. Find an arterial (busy) road in your city that provides access to many commercial areas or even the city center by car, but does not provide good opportunities for bike, walking, or transit. Critics of public transportation often complain about empty busses and the waste of taxpayer money that such vacancies represent as public transit is not a self-supporting mode of transportation. Critics of bike infrastructure often complain there isn't space in the road. In this assignment, you are to pick a one to two-hour block of time (2 hours is highly suggested) to observe and count traffic and vehicular occupancy/vacancy during that period. Such counting will also measure volume of vehicular use, which you can compare to the number of lanes on the street to see if there is a good match between lanes and users. More specifically, you are to:
  - Develop a data collection instrument that will allow you to separately note the type of vehicle (car, truck, bus, motorcycle) and observed occupancy. You may have to develop a generalization method so you can count quickly. For cars, it should be easy to count the number of occupants, but you may want to generalize the total number of seats (sedan = 4, minivan = 7, coupe = 2). For busses, you may want to count in quartiles (25% full, 50% full, etc.) and just know what the maximum seating or seating and standing capacity is on a typical bus.
  - Record this data in 15-minute time segments so you can compare traffic volume over time and also to divide up your data collection instrument in a way that makes it easier to keep data counts organized.

- Calculate the # of empty seats or vacancy (or occupancy) percentage, the overall volume, the v/c (volume to capacity level) if you can, and reflect and comment on all of this.
- Your final paper should be 2-3 pages, single-spaced, visually appealing, and directed to the City Manager as a short report as though you were city staff asked to do this assignment.
- Offer any recommendations that come to mind based on this observation and in keeping with the theme of sustainable transportation.
- **ALTERNATIVE FORMAT:** In place of the short paper, I am really interested in any creative representations of your data; so you can make a 1-page Infographic or even a short video or animation (up to 3 minutes) that communicates your observations and makes a point. You can do this on 11x17" format if you prefer and imagine this to be something that gets posted on office walls around city hall. If you have a suggestion for a different format, please discuss with me beforehand to get approval.
- Due: June 19<sup>th</sup>, 5pm. If helpful, this can be due June 14<sup>th</sup> so that you get it done.

**Diary / Journal / Blog:** Keep and share/show with instructor a diary/journal of your observations and thoughts and reflections regarding city life, urban design, and bicycle transportation while abroad. Entries should be nearly every day and can include a mixture of text, photos, sketches, or other methods appropriate to the students' discipline that can record evolving thought processes and observations on site. Keeping a blog as a diary is strongly encouraged and we can make a master web page that links to all student blogs. Computer-based diaries, however, are not required so that you can utilize a wider set of skills or interests in keeping daily records.

*As part of this journal, find 10 ordinary people (citizens, students, faculty or staff) who bike and ask them about it.*

### **Compiled Project:**

Most students will contribute to a final group project: a synthesis book or some other group determined final output that reflects their experiences and recommendations for translating new insights into practice in the US. The synthesis book will be designed to be broadly appealing to an external U.S. audience, (professionals, policy makers, and general community members) who have not had the good fortune to participate in this class or think about bicycle transportation in the deep way that you will during this course. The highly visual and accessible book will cover different aspects of what can make cities work well for normal people trying to use a bike normally to do normal life activities. The exact structure of this joint book project will be collectively developed and individual contributions will be decided upon on-site. The book will fuse illustrative photos of key elements, informed commentary about the subject, and the integration of evidence from the literature or from careful observations, to create a product that is reflective of student learning and something that can serve as a teaching tool for external audiences back home. There is some limited funding to print the book and potentially to cover some hourly work post-course for a student or two to get things into a finalized status.

There may be an alternative option for some students to do a different final project, from a traditional professional report to a customized movie, annotated photo journal, or other format agreeable to the instructors, although a strong desire is to have a jointly created book.

**Annotated Bibliography / Literature Review**

Find at least 20 sources related to some aspect of bicycle transportation or a related sub-discipline of transportation (approval of instructor is required) that can be included as context and evidence for the compiled group book.

At least 12 sources must be from academic journals (using the TRIS database is a good starting place). The other sources could be from books, popular magazine articles, government reports, or reports produced by advocacy organizations. All the sources should hold together. For the annotated bibliography, start with a one page, single spaced, summary and integration of your sources. Ideally, the style of writing will be to create an accessible narrative to be included as part of one of the sub-areas in the book. In addition, create an annotated bibliography on each source that includes: a proper APA formatted bibliographic entry (consult a librarian or numerous print or on-line sources on how to do this) and a short paragraph (3-5 sentences) describing the work.

**COURSE OUTLINE**

Date	City	Morning	Afternoon	Evening
6/23/2017	Copenhagen	Students Arrive	Meet and Get bikes	Group dinner
6/24/2017	Copenhagen	Bike Mike Tour	Lecture @ Henrik/Eva	Explore CPH
6/25/2017	Copenhagen	Scavenger Hunt	& Open Day	Picnic & Debrief
6/26/2017	Copenhagen	City Transportation Officials	Henrik Tour	
6/27/2017	Copenhagen	Jan Gehl Architects	Assignment Time	Scan Design dinner?
6/28/2017	Copenhagen	Assignment Time	Marc Lecture	CPH Water ride?
6/29/2017	Copenhagen	Designing Cities for kids	Designing Cities for kids	
6/30/2017	Copenhagen	Greenbelt ride with Henrik	Henrik	
7/1/2017	Helsingør	Bike to Helsingør (and spend night)	Visit COBE-Nordhaven on way	
7/2/2017	Lund	Bike to Lund (and spend night)	City tour	
7/3/2017	Malmo	Bike to Malmo	Malmo Tour 1	
7/4/2017	Malmo	Malmo	Malmo Tour 2	BBQ for July 4th
7/5/2017	Utrecht	Train to CPH airport	Fly to AMS and train to Utrecht	
7/6/2017	Utrecht	Get bikes	Scavenger hunt?	Picnic with Ronald Tamse
7/7/2017	Utrecht	Meet Ronald @ city offices	Go to Elementary School	

Date	City	Morning	Afternoon	Evening
7/8/2017	Utrecht	More Ronald & Utrecht Tour	Bike to Houten?	Pancake dinner ride
7/9/2017	Utrecht/Amsterdam?	Open time	Train or bike to Amsterdam	
7/10/2017	Amsterdam	Get local bikes	Marc Scavenger hunt	
7/11/2017	Amsterdam	Marjolein / Fiestersbond lecture and tour	Marjolein lecture and tour	Anne Frank House
7/12/2017	Amsterdam	Amsterdam City official	Open / Interviews	
7/13/2017	Amsterdam	Meet Meredith	Meredith Scavenger Hunt	Red Light District Tour
7/14/2017	Amsterdam	Meredith		
7/15/2017	Amsterdam	Open time	Canal ride	
7/16/2017	Amsterdam	Open time	Final Presentations	Group Dinner
7/17/2017	Amsterdam	Depart		

**COURSE READINGS**

*\*Please include page numbers of chapters*

Select readings will be available electronically.

**Standard citation needs to include: APA**