PUBLIC TRANSPORTATION

Plan 637-001 Fall 2023
The University of North Carolina at Chapel Hill

COURSE INFORMATION

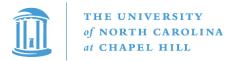**Credit Hours:** 3

Pre or Co-Requisites: Unclear

Target Audience: DCRP graduate students and advanced undergraduates

Meeting Pattern: Mondays and Wednesdays 2:30 to 3:45 PM

Instructional Format: in-person

Classroom or Location: Wilson Room 128

INSTRUCTOR INFORMATION

Name: Matthew Palm

Email Address: palmmatt@unc.edu

Office Location: 202 New East Building

Office Hours: Office hours are Mondays 1-2pm or Wednesdays 4-5pm or by appointment.

Zoom Room ID:

Monday office hours https://unc.zoom.us/j/93612831460

Wednesday office hours https://unc.zoom.us/j/97568391131

TEACHING ASSISTANT INFORMATION

Name: Heerae Lee (Ellie)

Email Address: heerae@unc.edu

Office Location: TA Office (405) New East Building

Office Hours: Office hours are Mondays 4-5pm or by appointment.

Zoom Room ID:

Monday office hours https://snu-ac-kr.zoom.us/j/96603486881

COURSE CONTENT

Course Description

This is an elective graduate/upper-level undergraduate course that introduces students to public transportation in the United States. We will cover transit governance, finance, planning, operations, societal impacts, and how to engage transit riders in the planning process. Throughout the course we will explore who benefits, who pays, who makes decisions, and for whom transit is planned and implemented.

The course is divided into file modules:
1. Transit past and present
2. Equity and engagement
3. Policy and financing
4. Service planning and performance management
5. Group project time

This course uses some materials, such as slide decks and suggested readings and assignments, from the American Public Transit Association's (APTA) National Transit Curriculum. I also draw on resources provided by Watkins, Mondla, and Brakewood.

We may have time during the semester to explore other issues of interest to students in the class.

The course will not cover land use and housing related concepts such as transit oriented development, gentrification and land value impacts, and debates around density. These are important topics that will be covered in my next course. This course is devoted to seeing things through the lens of the transit planner and operator.

<mark>I RESERVE THE RIGHT TO CHANGE THE SYLLABUS DURING THE TERM.</mark>

Course Texts & Materials

Everything you need is on canvas.

Class Expectations

What you get out of this class is directly proportional to the effort you put in it. Practicing the following will empower you to get the most out of this course:
- Complete all readings prior to class and come prepared to discuss. **This is most important.**
- Complete five out of the ten reading responses, and comment on at least five of your classmates' reading responses.
- Prepare one or more discussion questions for five weeks of your choice.
- Complete assignments on time. All work should be uploaded to Canvas unless otherwise directed.
- Ask questions of instructor or classmates in class, via email or at office hours, if you're unclear about a concept.

Course Goals & Student Learning Outcomes (SLOs)

By the end of the course, students should be able to:
- Describe the roles of public transit in our transportation systems and for various constituencies.
- Describe the different types of public transit, where to use them, and who will benefit.
- Identify current challenges to providing public transit –at the national, regional, and local level.
- Identify, collect, and analyze transit data.
- Evaluate public transit system service elements.
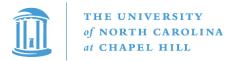
COURSE ASSIGNMENTS & ASSESSMENTS

Assignment Descriptions

Assignment 1: Ride Transit 15%

In this assignment you will make two trips by public transportation and compare them. One of these trips should be one you normally make using another mode of travel. The trips should serve different purposes (i.e., going to school vs shopping, or going out to eat vs going to a park, etc.) While riding, document as many details of your trip as you can, as notes or voice memos on your phone are probably best. Feel free to take pictures, too, but be respectful. You will use *thick description* to write a detailed account of your experience making these two trips. Describe what you see, hear, smell, taste, etc. Reflect on how these elements of your trip impact your mood, comfort, focus, well-being, sense of safety and feelings. Afterwards, reflect: How did these two trips compare? What aspects of the trip were great, which were not great? What aspects of the rider's experience need to be improved? Thinking about the trip you normally make by another mode; how did it compare? What makes transit (un)feasible for this particular trip? Note: if you pretty much only use the bus, I may ask you to try using a non-transit and then consider the prompt in reverse: why is the bus better than this alternative? **Due midnight (11:59 PM) on September 21st.**

Assignment 2: Reading Responses 10%

Reading responses are due at **Midnight on Saturday** if covering that week's reading (i.e., the week that just ended). You will submit five reading responses over the semester. There will be a total of ten reading responses opportunities listed in the tables below; you are only required to do five of them. You will be given a grade of 0, 1, or 2. Look for what you find

interesting, provocative, or contradictory in the readings, rather than simply critiquing them. Responses should be no longer than one page long or 500 words and should answer a question or explore a debate in the literature. We may post example questions/topics you can respond to.

Public Engagement Evaluation or Participation in Greensboro Trolley Day 15%

For this assignment, you will be traveling to Greensboro with your colleagues and gathering intercept surveys on the Greensboro Hopper Trolley on **Friday October 6th**. This will involve 2 hours of data collection, the department will provide a meal, and we will visit the autonomous vehicle track at A&T or do another site visit.

If you cannot make that event, You will attend a public engagement event organized by a transit agency or planning agency working on a transit issue. You may attend a virtual or in-person event. You will evaluate the event based on criteria that we will develop in class as an in-class exercise. This assignment can be turned in at any point in the semester after it is issued, but the deadline is the **last day of class at 11:59 PM** that day. I will post information about transit agencies' public engagement activities throughout the semester. I encourage you to attend one of them and complete the assignment as soon as you can, so you don't forget and are scrambling to get it done while also completing your final project.

Group Discussions 10%

Half of these points come from leading group discussions. These are discussions in which you and 1-3 other students will have prepared some discussion prompts based on the readings. You may run one big group discussion or have the class break up into smaller groups to address your prompts, with a report back at the end. That's up to your group. You are only preparing questions and turning them into me, there is no presentation. The other half of these points come from participating in group discussions, i.e. when you are not the organizer you are still engaged and responding to the prompts the organizers have given you. You **must** participate vocally in class at least once a week. There will be plenty of opportunities.

Midterm 15%

The second and third modules of the class cover a wide range of technical details that are useful for practicing planners. To ensure that you are developing such a working knowledge, you will be tested on these topics. The test will take an hour and consist of short answers, multiple choice, true/false, and other questions.

Final Project 35%

You and your team will address a transit issue in the region. I am currently seeking engagement from a couple of local agencies to give you access to data to do a public-facing, policy relevant project. More details will be provided when those opportunities are confirmed. We may elect to do one or two big projects as a class, in which case I will solicit resources from the department and university to support data collection and analysis. If this occurs, I will scale back the midterm to give us more room to work on projects.

Grading Scale & Schema

Late Work

If it looks like you are unable to complete an assignment on time, talk to me and we can try to work something out. However, if you do not reach out to me in advance, the following late work penalties apply:

Days Late	Deduction
24 hrs	-10%
48 hrs	-12%
72 hrs	-15%
5 days	-20%
7 days	-25%
Over 14 days	Fail (50%)

Grading Rubrics

Will be distributed in class.

Undergraduate Grading Scale

Numeric Grade (%)	Letter Grade
93.5 and above	A
89.5 – 93.4	A-
86.5 – 89.4	B+
82.5 – 86.4	B
79.5 – 82.4	B-
76.5 – 79.4	C+
72.5 – 76.4	C
69.5 – 72.4	C-
66.5 – 69.4	D+
59.5 – 66.4	D
59.4 and below	F

Table a: Grading Scale Table

COURSE SCHEDULE

Setting the context: Transit past and present

Class (Date/Week)	Topic(s)	Readings & Assignments Due
Aug 21 (Week 1)	**Introduction** **What is public transit?** **10 defining facts of public transit today**	**None!**
Aug 23 (Week 1)	**Basic terminology and definitions**	**Walker chp. 1-3**
Aug 28 (Week 2)	**Pre-War American Transit**	**Bloom, p. 1-23, Bloom, "Baltimore" and post-war intro**
Aug 30 (Week 2)	**The Great American Transit Disaster** *Discussion day*	**Bloom, chp. 4 ("Baltimore" post war)**
Sep 4 (Week 3)	**Holiday, no class!**	
Sep 6 (Week 3)	**The Great American Transit Disaster** *Discussion day*	**Bloom, chp. 4 ("Baltimore" post war)** *Readings response opportunity for this week (due Saturday 11:59pm)*

Table b: Unit/Module 1 Schedule

Service planning and performance management

Class (Date/Week)	Topic(s)	Readings & Assignments Due
Sep 11 (Week 4)	**Transit Satisfaction** *Discussion day*	**Van lierop et al 2023; Carvalho dos Reis Silveira et al 2023 (SKIM)**
Sep 13 (Week 4)	**Transit network design fundamentals**	**Walker chp 4, 10, 12**
Sep 18 (Week 5)	**Network design cont'd**	**Walker chp 4, 10, 12**
Sep 20 (Week 5)	**Route level planning**	**Walker chp 5, 15**
Sep 25 (Week 6)	**Well-being day (no class!)**	**Be well!!!**
Sep 27 (Week 6)	**Guest Speaker: Hanna Cockburn, Department of Transportation, City of Greensboro Discussion day-BRT**	**Deng and Nelson 2011;** The BRT Standard (SKIM) https://www.greensboro-nc.gov/departments/transit/goboro-greensboro-s-long-range-transit-plan *Readings response opportunity for this week (due Saturday 11:59pm)*
Oct 2 (Week 7)	**Measuring quality of service**	**Walker chp 7, 8**
Oct 4 (Week 7)	**ODT/DRT** *Discussion day*	**Patel et al, 2022; TCRP 141 (Summary and a case study of your choice)** *Readings response opportunity for this week (due Saturday 11:59pm)*

Table c: Unit/Module 2 Schedule

Policy and financing

Class (Date/Week)	Topic(s)	Readings & Assignments Due
Oct 9 (Week 8)	**Financing**	Freemark 2021; CBO 2022; McArthur et al. 2020; *Readings response opportunity for this week (due Saturday 11:59pm)*
Oct 11 (Week 8)	**Transit cost overruns** *Discussion day*	**Flyvbjerg et al 2023; Goldwyn et al 2023 (JUST Boston OR New York)**
Oct 16 (Week 9)	**Fares—structures, technologies, and impacts** *Discussion day*	**Golub et al. 2022; Brown 2018; Walker chp 11** *Readings response opportunity for this week (due Saturday 11:59pm)*
Oct 18 (Week 9)	**The Fare-less transit debate** *Discussion day*	**SAJE 2023 (SKIM); Kębłowski 2020; King and Taylor 2023;** Grabar 2021; Demsas 2022
Oct 23 (Week 10)	**Governance** *Discussion day*	**Transit Center 2022b; Fisher et al. 2020** *Readings response opportunity for this week (due Saturday 11:59pm)*

Table d: Unit/Module 3 Schedule

Equity and Engagement

Class (Date/Week)	Topic(s)	Readings & Assignments Due
Oct 25 (Week 10)	**Introduction to public engagement**	**Assignment Issued;** **TCRP 89 p. 1-40 and one of the case studies of your choice** *Readings response opportunity for this week (due Saturday 11:59pm)*
Oct 30 (Week 11)	**Innovative strategies for engagement** *Discussion day*	**Stewart et al 2018; Oloonabadi & Baran 2023; Klumpenhouwer et al., 2021** *Readings response opportunity for this week (due Saturday 11:59pm)*
Nov 1 (Week 11)	**Well-being day (no class!)**	**Be well!!!**
Nov 6 (Week 12)	**Transportation equity**	**Krapp et al 2021; Karner and Marcantonio 2018**
Nov 8 (Week 12)	**From equity to justice** *Discussion day*	**Martens et al 2022; Karner et al 2020;** *Readings response opportunity for this week (due Saturday 11:59pm)*
Nov 13 (Week 13)	**Disability and Paratransit** *Discussion day*	**Levine & Karner 2023; TCRP 135 (Read just the summary!)**
Nov 15 (Week 13)	**Midterm in class**	*Midterm in class*
Nov 20 (Week 14)	**Introduce Final Project; Pick Teams**	**Final Project Assignment Handed Out**
Nov 22 (Week 14)	**No class!**	

Table e: Unit/Module 4 Schedule

Project-based work

Class (Date/Week)	Topic(s)	Readings & Assignments Due
Nov 27 (Week 15)	**Work in class on project**	
Nov 29 (Week 15)	**Work in class on project**	
Dec 4 (Week 16)	**Group presentations**	
Dec 6 (Week 16)	**Group presentations**	*Public engagement assignment due if not completed already. Final project due.*
[Final Exam Period]	[Final Exam/Assessment]	[Final Exam/Assessment]

Table f: Unit/Module 5 Schedule

POLICY STATEMENTS

Academic Policies

University Class Attendance Policy (required)

University Policy: As stated in the University's Class Attendance Policy, no right or privilege exists that permits a student to be absent from any class meetings, except for these University Approved Absences:

1. Authorized University activities: University Approved Absence Office (UAAO) website provides information and FAQs for students and FAQs for faculty related to University Approved Absences
2. Disability/religious observance/pregnancy, as required by law and approved by Accessibility Resources and Service and/or the Equal Opportunity and Compliance Office (EOC)
3. Significant health condition and/or personal/family emergency as approved by the Office of the Dean of Students, Gender Violence Service Coordinators, and/or the Equal Opportunity and Compliance Office (EOC).

Instructors may work with students to meet attendance needs that do not fall within University approved absences. For situations when an absence is not University approved (e.g., a job interview, illness/ flu or club activity), instructors are encouraged to work directly with students to determine the best approach to missed classes and make-up assessment and assignments.

Honor Code Statement (required)

All students are expected to follow the guidelines of the UNC Honor Code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate the Honor Code, please see me, or consult studentconduct.unc.edu.

Syllabus Changes (required)

The instructor reserves the right to make changes to the syllabus including project due dates and test dates. These changes will be announced as early as possible.

Acceptable Use Policy

By attending the University of North Carolina at Chapel Hill, you agree to abide by the University of North Carolina at Chapel Hill policies related to the acceptable use of IT systems and services. The Acceptable Use Policy (AUP) sets the expectation that you will use the University's technology resources responsibly, consistent with the University's mission. In the context of a class, it's quite likely you will participate in online activities that could include personal information about you or your peers, and the AUP addresses your obligations to protect the privacy of class participants. In addition, the AUP addresses matters of others' intellectual property, including copyright. These are only a couple of typical examples, so you should consult the full Information Technology Acceptable Use Policy, which covers topics related to using digital resources, such as privacy, confidentiality, and intellectual property. Additionally, consult the Safe Computing at UNC website for information about data security policies, updates, and tips on keeping your identity, information, and devices safe.

Data Security & Privacy

UNC-Chapel Hill Privacy Statement: Sakai's Discussion Forum, Assignments, DropBox, Gradebook, and Tests & Quizzes tools are designed to share FERPA-protected information privately between instructors and individual students.

Grade Appeal Process

If you have any concerns with grading and/or feel you have been awarded an incorrect grade, please discuss it with me as soon as possible. If we cannot resolve the issue, you may talk to our director of undergraduate studies or department chair.

Services & Student Support Policies

Accessibility Resources & Services (ARS) (required)

Accessibility Resources and Service (ARS – ars@unc.edu) receives requests for accommodations, and through the Student and Applicant Accommodations Policy determines eligibility and identifies reasonable accommodations for students with disabilities and/or chronic medical conditions to mitigate or remove the barriers experienced in accessing University courses, programs and activities. ARS also offers its Testing Center resources to students and instructors to facilitate the implementation of testing accommodations. Faculty and instructors with any concerns or questions about accommodations and/or their implementation, are invited to reach out to ARS to discuss.

Counseling & Psychological Services (CAPS) (required)

UNC-Chapel Hill is strongly committed to addressing the mental health needs of a diverse student body. The Heels Care Network website is a place to access the many mental health resources at Carolina. CAPS is the primary mental health provider for students, offering timely access to consultation and connection to clinically appropriate services. Go to their website https://caps.unc.edu/ or visit their facilities on the third floor of the Campus Health building for an initial evaluation to learn more. Students can also call CAPS 24/7 at 919-966-3658 for immediate assistance.

Title IX Resources (required)

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community. Reports can be made online to the EOC at https://eoc.unc.edu/report-an-incident/ or by contacting the University's Title IX Coordinator (Elizabeth Hall, titleixcoordinator@unc.edu) or the Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu). Confidential resources include Counseling and Psychological Services and the Gender Violence Services Coordinators (gvsc@unc.edu). Additional resources are available at safe.unc.edu.

Policy on Non-Discrimination

The University is committed to providing an inclusive and welcoming environment for all members of our community and to ensuring that educational and employment decisions are based on individuals' abilities and qualifications. Consistent with this principle and applicable laws, the University's Policy Statement on Non-Discrimination offers access to its educational programs and activities as well as employment terms and conditions without respect to race, color, gender, national origin, age, religion, genetic information, disability, veteran's status, sexual orientation, gender identity or gender expression. Such a policy ensures that only relevant factors are considered, and that equitable and consistent standards of conduct and performance are applied. If you are experiencing harassment or discrimination, you can seek assistance and file a report through the Report and Response Coordinators (email reportandresponse@unc.edu or see additional contact info at safe.unc.edu) or the Equal Opportunity and Compliance Office at https://eoc.unc.edu/report-an-incident/.

Diversity Statement

I value the perspectives of individuals from all backgrounds reflecting the diversity of our students. I broadly define diversity to include race, gender identity, national origin, ethnicity, religion, social class, age, sexual orientation, political background, and physical and learning ability. I strive to make this classroom an inclusive space for all students. Please let me know if there is anything I can do to improve. I appreciate any suggestions.

Undergraduate Testing Center

The College of Arts and Sciences provides a secure, proctored environment in which exams can be taken. The center works with instructors to proctor exams for their undergraduate students who are not registered with ARS and who do not need testing accommodations as provided by ARS. In other words, the Center provides a proctored testing environment for students who are unable to take an exam at the normally scheduled time (with pre-arrangement by your instructor). For more information, visit http://testingcenter.web.unc.edu/.

Learning Center

Want to get the most out of this course or others this semester? Visit UNC's Learning Center at http://learningcenter.unc.edu to make an appointment or register for an event. Their free, popular programs will help

you optimize your academic performance. Try academic coaching, peer tutoring, STEM support, ADHD/LD services, workshops and study camps, or review tips and tools available on the website.

Writing Center

For free feedback on any course writing projects, check out UNC's Writing Center. Writing Center coaches can assist with any writing project, including multimedia projects and application essays, at any stage of the writing process. You don't even need a draft to come visit. To schedule a 45-minute appointment, review quick tips, or request written feedback online, visit http://writingcenter.unc.edu.