

# USP 544: Urban Transportation Planning

## Winter Quarter 2025

**Time:** Thursdays 4:00 – 6:30 p.m. **Room:** Urban Center Room 304

**Instructor:** Liming Wang, PhD [lmwang@pdx.edu](mailto:lmwang@pdx.edu)

**Office Hours:** Thursday 2:00 – 3:45 pm ⇨ or by appointment ⇨

## COURSE DESCRIPTION

Transportation planning is a relatively new field, and in many ways developed out of concern for the various deficiencies found in traditional transportation engineering practice. While some planning practice clearly overlaps with engineering approaches, such as traffic impact analysis, other issues such as public involvement and regional planning bring broader methods to bear on transportation problems. In this course, we introduce students to the most common elements and processes in urban transportation planning. We organize the course starting with federal, state, and local planning processes, followed by sessions on some of the major elements of urban transportation planning. This is a skill-based course, presenting topics and information in the context of the practicing urban planning professional. A focus of this course is on the application of these urban transportation planning principles in agency and consultant work.

**Learning Objectives** By the end of this course, students will be able to:

### KNOWLEDGE

- Explain the historical development of urban transportation planning and its relationship to engineering
- Analyze the interconnections between transportation systems, land use, and travel behavior
- Evaluate federal, state, and local transportation planning frameworks and their implementation
- Analyze how transportation policies and plans address contemporary challenges including equity, sustainability, and safety

### TECHNICAL SKILLS

- Apply appropriate analytical methods to assess transportation impacts and needs
- Design context-sensitive transportation solutions that balance multiple objectives
- Develop evidence-based transportation plans that comply with federal and state requirements
- Create effective technical documentation including memos, reports, and planning documents

### PROFESSIONAL CAPABILITIES

- Design and implement effective public involvement strategies for transportation projects
- Evaluate transportation proposals from multiple stakeholder perspectives
- Synthesize technical analysis and public input to develop actionable recommendations
- Collaborate effectively in interdisciplinary teams to develop transportation plans
- Present transportation planning concepts and proposals to diverse audiences

# ASSESSMENT AND GRADING

The course includes required weekly readings and class meetings, several assignments, a group project, and a final exam. Students are expected to do the readings before class, as we will discuss and debate the readings during class, and you will be graded on your participation. It is essential to come to every meeting in this course.

Assignments should be treated as technical memos that would be delivered to a client, and will be judged for their coherence, clarity, and quality of writing. **Communication is an essential tool of planning and writing quality will be considered as part of the grade for each assignment. If you need help with writing, please contact the PSU Writing Center – they are a great resource!** When appropriate, make sure you cite all references and sources of data. Because the assignments emphasize audience-specific formats like technical memos to decision-makers, it may be inappropriate to cite sources in standard academic fashion.

All assignments should be uploaded as a Word or PDF file onto Canvas for the class. Please also bring the assignments with you to class as they will likely be discussed (on your computer/tablet is fine).

The final grade will be calculated from weighting the assignments and in-class performance in the following manner:

1. Assignments	50%
2. In-class participation and attendance	15%
3. Group project & presentation	25%
4. Final Exam	10%

**Short Assignments:** There will be assignments posted to accompany the required readings and will be due the date of the class in which they will be discussed. Assignment due dates are non-negotiable except for very extenuating circumstances (medical, family emergency). Late assignments with no excuse will not be accepted.

**Group Term Project:** Your group is tasked with creating a transportation plan for a community in Oregon. Your term project has three components, that will be completed as part of a team:

- An annotated outline of your Plan
- The Plan document
- A presentation on your plan to the class, professors

Your group's plan will build on material covered in the course throughout the term. Students can break up the work amongst the team in a manner of their choosing, but all team members must

contribute in a way that is fair and equitable. Some class assignments will relate to the term project. A full description of the term project will be posted on Canvas later.

**Final Grading Scale:** A 94.0 % and above ; A- 90.0 % ; B+ 87.0 % ; B 84.0 % ; B- 80.0 % , etc. – This follows standard grading scale for Portland State University and is not negotiable

## COURSE RESOURCES

**Readings:** There is *no* textbook for the course. The Canvas site contains all assignments and required readings (except for those readings that are hyperlinked in the class schedule below). Please upload your completed assignments to the relevant assignment folders. We will use Canvas to grade assignments and provide feedback.

## Schedule (subject to change)

Date	Subject	Assignments and Readings (posted on Canvas)
1/9	<ul style="list-style-type: none"><li>• Introduction and course overview</li><li>• Brief history</li><li>• Trends</li><li>• Vision, goals, and objectives</li></ul>	<ul style="list-style-type: none"><li>• <b>Assignment #1 Pick-a-plan (due 1/16)</b></li></ul> Readings: <ul style="list-style-type: none"><li>• <b>Oregon Planning Goal 12 (skim)</b></li><li>• <b>Mobility Standards Paper (pages 1-4)</b></li><li>• <b>Meyer-Miller Chapter 4.3</b></li><li>• <b>A Historical Overview: Chapters 3 and 12</b></li><li>• Title VI guidelines</li><li>• NEPA Primer</li></ul>
1/16	<ul style="list-style-type: none"><li>• Discuss Assignment #1</li><li>• Federal Planning Framework</li><li>• National Environmental Policy Act (NEPA)</li><li>• Title VI and Environmental Justice</li><li>• Transportation planning rule (TPR)</li><li>• Transportation system plans (TSPs) (part 1)</li></ul>	<ul style="list-style-type: none"><li>• <b>Assignment #2: BUD (Due 1/23)</b></li></ul> Readings for the following week: <ul style="list-style-type: none"><li>• Best practices for Traffic Impact Studies (skim)</li></ul>

	<ul style="list-style-type: none"> <li>• Blueprint for Urban Design</li> </ul>	
1/23	<ul style="list-style-type: none"> <li>• Discuss Assignment #2</li> <li>• Traffic impact analysis</li> <li>• Transportation Demand Management</li> <li>• Development planning</li> <li>• Access management</li> <li>• Group project: questions, discussion</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Assignment #3: traffic impact analysis, parking (Due 1/30/24)</b></li> <li>• <b>Start group project Annotated Outline (Due 2/13/24)</b></li> </ul> <p>Readings for following week:</p>
1/30	<ul style="list-style-type: none"> <li>• Discuss Assignment #3</li> <li>• Evaluation criteria</li> <li>• Politics and “how things get done” T2020, FOS, RFFA, etc.</li> </ul>	<p>Readings for following week:</p> <ul style="list-style-type: none"> <li>• Section of Public Participation in Env. Assessment and Decision- making</li> <li>• Oregon Transportation Plan: Outreach Summary During Plan Development</li> </ul>
2/6	<ul style="list-style-type: none"> <li>• Discuss Assignment #4</li> <li>• Meaningful public involvement</li> <li>• Transportation system plans (part 2)</li> </ul> <p>Guest lecture: OTP, Adam Argo, ODOT</p>	<ul style="list-style-type: none"> <li>• <b>Assignment #4: Public involvement plan (Due 2/13)</b></li> </ul> <p>Readings for the following week:</p> <ul style="list-style-type: none"> <li>• Read Jarrett Walker piece: <a href="https://humantransit.org/basics/the-transit-ridership-recipe">https://humantransit.org/basics/the transit-ridership-recipe</a></li> <li>• Skim <a href="#">Section 5309 Program</a> <a href="#">overview</a></li> <li>• <a href="#">Parts of TRB Parking Management Guide</a></li> <li>• Preface to <i>High Cost of Free Parking</i></li> </ul>
2/13	<ul style="list-style-type: none"> <li>• Urban transit planning and capital investments</li> <li>• Group project “office hours”</li> </ul> <p>Guest lecture: Tony Jordan, Parking Reform Network</p>	<ul style="list-style-type: none"> <li>• <b>Group project Annotated Outline due</b></li> <li>• Work on term project!</li> </ul> <p>Readings for following week:</p> <ul style="list-style-type: none"> <li>• <b>Chapter 5 of Seattle Ped Plan</b></li> <li>• Chapter of NCFRP Freight Planning Guide</li> <li>• <b>Assignment #5: Active transportation planning (Due 2/27/24)</b></li> <li>• Work on term project!</li> </ul>
	<ul style="list-style-type: none"> <li>• Discuss Assignment #5</li> <li>• Active transportation and emerging mobility (bike, pedestrian,</li> </ul>	

2/20	<p>bike share, scooter share, etc.)</p> <ul style="list-style-type: none"> <li>• Mega projects (Interstate Bridge Replacement project and others)</li> <li>• Freight issues</li> <li>• Group project “office hours”</li> </ul> <p>Guest Lecture: Russ Doubleday, DKS</p>	<p>Readings for following week:</p> <ul style="list-style-type: none"> <li>• <u>Safe Streets for All: A transportation safety update to JPACT and the Metro Council</u> ➞</li> <li>• <u>Safe and Healthy Arterials policy brief for the 2023 RTP</u> ➞</li> <li>• <u>2018 Regional Transportation Safety Strategy</u> ➞</li> <li>• <u>2016-2020 Regional High Injury Corridors</u> ➞</li> <li>• <u>Metro Designing Livable Streets and Trails Guide</u> ➞</li> <li>➞• Metro transportation safety webpage: <a href="https://www.oregonmetro.gov/regional-transportation-safety-plan">https://www.oregonmetro.gov/regional-transportation-safety-plan</a> ➞</li> <li>• Work on final exam/term project</li> </ul>
2/27	<ul style="list-style-type: none"> <li>• Safety Planning</li> <li>• Vision Zero</li> </ul>	<p>Readings:</p> <ul style="list-style-type: none"> <li>• Modeling Primer</li> <li>• <u>Reducing Greenhouse Gas Emissions: A Guide for State DOTs (skim)</u> ➞</li> <li>• <u>A Statewide Coordinated Greenhouse Gas Reduction Effort in Oregon</u> ➞</li> </ul>
3/6	<ul style="list-style-type: none"> <li>• Modeling and its applications to urban transportation planning</li> <li>• Induced Demand</li> <li>• Reducing GHG through transport planning</li> <li>• Group project “office hours”</li> </ul> <p>Guest Lecture: Aaron Breakstone, Metro</p>	<ul style="list-style-type: none"> <li>• <b>Final Exam (take home, due 3/13)</b></li> </ul> <p>Readings for following week:</p> <ul style="list-style-type: none"> <li>• Metro presentation on pandemic changes</li> <li>• <u>On the future of transportation in an era of automated and autonomous vehicles</u> ➞</li> </ul>
3/13	<ul style="list-style-type: none"> <li>• Future of transportation and implications for planning</li> <li>• Post-pandemic paradigm</li> <li>• Final Musings</li> <li>• Guidance on presentations for 3/20</li> <li>• Group project “office hours”</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Final exam due on Canvas by 4 pm 3/13</b></li> <li>• <b>Work on term project</b></li> </ul>

## Acknowledgements

I am grateful to previous USP 544 instructors Kate Drennan and Ryan Farncomb for sharing their course materials.

## Academic Integrity

Students are expected to be ethical not only in the classroom, but also out of the classroom. It is in all students' interest to avoid committing acts of academic dishonesty and to discourage others from committing such acts. Academic dishonesty includes, but is not limited to, the following examples: engages in any form of academic deceit; refers to materials or sources or uses devices not authorized by the instructor for use during any quiz or assignment; provides inappropriate aid to another person in connection with any quiz or assignment; engages in Plagiarism. Plagiarism is the act of claiming someone's work as your own through copying it without giving the creator of the work credit. Plagiarism can also include using another person's theories, ideas, or phrases without proper attribution. The simplest way to avoid plagiarizing is to always cite the sources from which you gather information or develop arguments – just cite anything you use from someone else (it actually makes your work stronger!). Plagiarism is a serious issue and is a violation of the PSU Student Conduct Code [http://www.ess.pdx.edu/OSA/osa\\_b.htm](http://www.ess.pdx.edu/OSA/osa_b.htm). University policy requires instructors to report all instances of plagiarism and penalize the perpetrator(s) according to guidelines set. Please see University Writing Center if you ever have any questions about how to cite your work, or contact your Professor.

## Access and Inclusion for Students with Disabilities

PSU values diversity and inclusion; My goal is to create a learning environment that is accessible, equitable, inclusive, and welcoming. I am committed to fostering mutual respect and full participation for all students. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. Additionally, the Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment. The DRC works with students who have physical, learning, cognitive, mental health, sensory, chronic illness, and other disabilities.

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations.

If you already have accommodations, please contact me to make sure that I have received your DRC Faculty Notification Email so we can discuss your accommodations.

The DRC is located in 116 Smith Memorial Student Union, Suite 116. You can also contact the DRC at 503-725- 4150 or, [drc@pdx.edu](mailto:drc@pdx.edu). Visit the DRC online at <https://www.pdx.edu/disability-resource-center>.

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Portland State is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment (sexual assault, domestic and dating violence, and gender or sex-based harassment and stalking). If you have experienced any form of gender or sex-based discrimination or sexual harassment, know that help and support are available. Information about PSU's support services on campus, including confidential services and reporting options, can be found on PSU's Sexual Misconduct Prevention and Response website at: <http://www.pdx.edu/sexual-assault/get-help> or you may call a confidential IPV

Advocate at 503-725-5672 or schedule Online at <https://psuwrc.youcanbook.me> . You may report any incident of discrimination or discriminatory harassment, including sexual harassment, to:

- PSU's Title IX Coordinator: Julie Caron by calling 503-725-4410, via email at [titleixcoordinator@pdx.edu](mailto:titleixcoordinator@pdx.edu) or in person at Richard and Maureen Neuberger Center (RMNC), 1600 SW 4th Ave, Suite 830
- Deputy Title IX Coordinator: Yesenia Gutierrez by calling 503-725-4413, via email at [yesenia.gutierrez.gdi@pdx.edu](mailto:yesenia.gutierrez.gdi@pdx.edu) or in person at RMNC, 1600 SW 4th Ave, Suite 830

Please be aware that all PSU faculty members and instructors are required to report information of an incident that may constitute prohibited discrimination, including sexual harassment and sexual violence. This means that if you tell me about a situation of sexual harassment or sexual violence that may have violated university policy or student code of conduct, I have to share the information with my supervisor, the University's Title IX Coordinator or the Office of the Dean of Student Life. However, the Title IX Coordinators will keep the information confidential and refer you to a confidential advocate. For more information about Title IX please complete the required student module Creating a Safe Campus in your Canvas.

## Syllabus Disclaimer

All syllabi are subject to minor changes to meet the needs of the instructors, school, or class. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus or schedule changes in class, and through the Canvas announcements and class email. Please remember to check your PSU email and the Canvas messages often.