

URBAN 576/CET 586: User and Design Considerations for Pedestrian and Rolling Mobility (3 credits)

Spring 2025 | Tuesdays & Thursdays 3:00-4:20 pm | Loew Hall (LOW) 201

Instructor: Professor Rachel Berney, Ph.D. (she/her)

Email: rberney@uw.edu

Office: Gould 448C

Office hours: Online and in person, by appointment

TA: Haoyu Yue, Ph.D. Student (he/him)

Email: yohaoyu@uw.edu

Office: Gould 012C

Office hours: Online and in person, by appointment

Course website: <https://canvas.uw.edu/courses/1799989>

Overview

Course Description

This course invites students across UW to learn from and engage with one another and the instructor on non-motorized transportation (NMT) issues for walking and rolling. The class focuses on user needs and experience, urban form, land use, and design and planning considerations for NMT. As cities seek to move towards more sustainable and equitable transportation systems, questions about resource distribution arise from the perspectives of modal split and equitable investment.

Cities are incorporating NMT facilities to rebalance their transportation planning and design approaches. Practitioners, advocates, community members, and city staff are also engaging in robust conversations and critiques about issues of transportation justice, such as the “right to mobility” and fears about gentrification pressures resulting from NMT infrastructure investment.

Learning Objectives

By the end of this course, you will be able to:

- Define and describe pedestrian and rolling travel and understand basic design parameters and complementary interactions.
- Refer to and describe examples of successful NMT design tools and precedents.
- Critically examine the interrelationships and considerations of user need, equity, form and/or design decisions concerning NMT.
- Recognize and debate socioeconomic, social, design, and political trade-offs of building NMT infrastructure.

Pedagogical Approach

This class uses readings, presentations, guest experts, small-group class discussions, activities, fieldwork, written assignments, and team projects to enhance your ability to reflect upon issues related to non-motorized transportation critically and support your professional development.

Learning Modalities Framework

- Active learning: reading, writing, discussing, participating in field discovery.
- Student-centered learning: a course shaped by students' interests, abilities, and learning styles.
- Collaborative learning: builds on active and student-centered learning by promoting group-based activities such as discussion groups.
- Interaction and skills-oriented practice of pluralistic dialogue (interaction involving everyone), active listening, inclusive tolerance, and critical thinking.

Classroom Norms & Expectations

Equity, Diversity & Inclusion

The University of Washington and the Department of Urban Design and Planning (UDP) believe equity, diversity, and inclusion are integral to excellence.

UDP Mission

UDP is striving to shift the culture of planning to engage and enhance diversity, equity, and inclusion, not just within the academic context, but also in the profession. We aspire to drive change not merely by responding to trends, but also by leading the change we seek.

UDP Values

Equity - Strive for fairness of results/outcomes rather than equal access to opportunity. Diversity - A vibrant and healthy community involves recognizing and supporting differences. Inclusion - Create an environment where everyone can participate and everyone belongs.

In this class, we will value and honor diverse experiences and perspectives and strive to create a welcoming and respectful learning environment for all students. In this class, we will also respect the general goals of academic freedom and ensure that they are maintained. Differences of opinion, critical analysis, and honest feedback are welcomed and should be expressed in a manner that supports the learning process.

Course-specific Policies Conduct and Culture

This classroom is meant to be an inclusive and welcoming space, with some ground rules to help promote a shared classroom experience. Collectively, we will strive to create and maintain a space where we all:

- Respect and support each other
- Actively listen
- Contribute
- Brainstorm
- Ask questions
- Take risks
- Monitor your air time
- Consider intent vs. impact
- Strive for excellence
- Do your best and move forward

Participation

While this class includes instructor and guest presentations, it also relies on robust discussion and small group work to help us critically examine NMT issues in the class context. The quality of each class will depend upon your preparation and participation. The questions for each class session create a starting point for examining themes in the readings critically. Please use these study questions and others to guide your reading and analysis of the readings and discussion; they can also serve as a jumping-off point for discussion.

Participation points in this course will be awarded for discussion (online and in class) and contributions to class (pair and small group exercises, peer review, etc.) In short, there are many ways to earn participation points.

Also, see Assignments.

Modules

You will find information and reading links, discussion links, and assignments in the weekly Modules.

Communication

You can reach us via email and in person during class and office hours. We try to reply to emails within 48 hours, 72 hours over a weekend, and the workday following a holiday unless otherwise noted. We may not be available for questions during the 24 hours before an assignment is due – so plan ahead. Simple questions will be answered by email, but students may be asked to schedule a meeting for more complex discussions.

To promote independence and critical thinking, students are encouraged to work through the following process to obtain answers to course-related questions before contacting the instructor. First, consult the course syllabus. If you do not find the answer you need, consult a classmate. Finally, if you have exhausted these methods, email the instructor.

Class materials will be accessed through Canvas, and the class Q&A will be through Ed Discussion.

If you feel that any of these standards are not being met by a fellow student or an instructor, you should discuss your concerns with the instructor or bring them to the attention of the Department Chair or other administration representative.

Course evaluation

Formal course evaluation occurs at the end of the quarter university-wide. If you are experiencing a problem with the class, please let us know as soon as possible so we can correct any needed changes within the course. We welcome ongoing feedback on how to create the best course experience.

Technology in the Classroom

Please be respectful when using technology. Also see Academic Accommodations.

Missing Class

If you cannot attend class, please do your best to let us know before class. Please note that missing two or more class sessions will put you at risk of a reduced participation grade.

Course Requirements

Readings

This class has three "readings" types: required, recommended, and reference library/additional resources. Everyone is responsible for the required readings and encouraged to examine the other readings.

Technological Proficiency and Hardware/Software Required

To complete the assignments, all students should be comfortable using Microsoft Word, Excel, and PowerPoint or the equivalent programs. GIS and SketchUp proficiency may be useful for the team project. Basic knowledge of graphic design software (e.g. Adobe Illustrator and InDesign) will also be helpful.

Students who require a device for academic purposes have access to the UW Student Loaner Program. Please visit <http://be.washington.edu/spaces/computing/student-loaner-program/>. Students are also welcome to conduct any needed computer-based work in the Digital Commons in the basement of Gould Hall or other computer labs on campus.

Course Costs

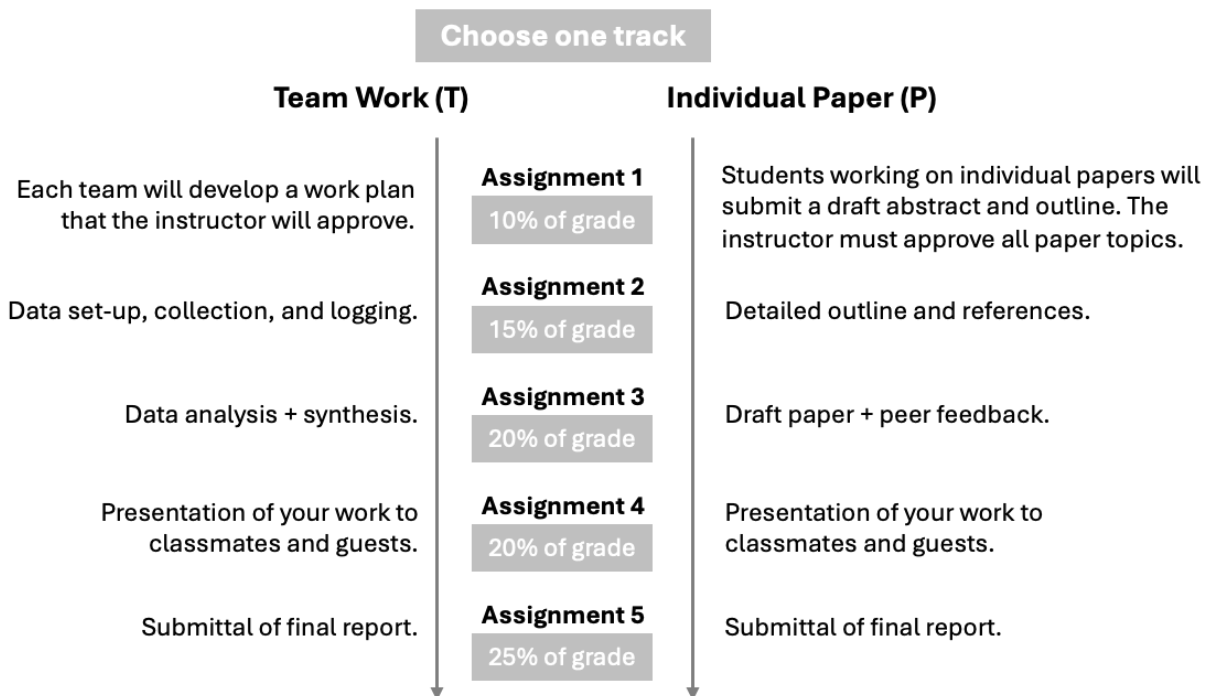
None are anticipated for this class.

Assignment Overview

Participation/Discussion (10% of grade)

There are regular in-class exercises. While these are not graded, we do count them towards your participation.

Team Work (T) or Individual Paper (P) (90% of grade)



Performance criteria

I will be looking for complete responses to each assignment prompt. Also, see the specific assignment descriptions.

Grading

Grading Scale

Final course grades will be calculated using the UW Grading Scale. Please note that grades may be curved within the sub-categories (e.g. A).

A	3.9-4.0	Outstanding
A-	3.5-3.8	Excellent
B+	3.2-3.4	Competency achieved to high standard
B	2.9-3.1	Competency achieved
B-	2.5-2.8	Below Competency

Late Work

Late work submission will be negotiated by the student and instructor. Substantial lateness may result in a grade deduction.

Course Schedule

Subject to change as needed over the quarter. The most recent version of the syllabus and schedule can always be found on our class's Canvas site.

Date	Topic	Invited Guest	Assignments (Team)	Assignments (Paper)
Week 1 NMT & Public Life Studies Intro				
4/1	Intro to Public Life Studies	SDOT personnel	Begin weekly reading assignments (during Week 1, you will read for Week 2, etc.), and continue throughout the class	
4/3	Course and NMT Intro			Proposed paper topics due for review
Week 2 User Needs & Behavior				
4/8	User Needs & Behavior		Choose an assignment track, T1 Assigned: Team Workplan	Choose an assignment track, P1 Assigned: Draft Abstract & Outline
4/10	User Needs & Behavior, Walkability			
Week 3 Pedestrian Considerations & Walkability				
4/15	Pedestrian considerations & walkability	<u>Dr. Jonathan Maskit</u> (Denison University)		
4/17	Pedestrian considerations & walkability	Dr. Branden Born	T1 Due, T2 Assigned: Data Collection & Organization (subject to SDOT schedule)	P1 Due, P2 Assigned: Detailed Outline & References List
Week 4 Rolling Mobility Considerations				
4/22	Bicycling/Rolling			
4/24	Micromobility			
Week 5 Accessibility & the NMT Environment				
4/29	Models of Disability	Disability studies program faculty		
5/1	Activities of Daily Living	Dr. Shannon Tyman	T2 Due, T3 Assigned: Data Analysis	P2 Due, P3 Assigned: Draft Paper & Peer Feedback
Week 6 Equitable Development & NMT, Healthy Equity?				
5/6				
5/8				
Week 7 Neighborhood Mobility Planning				
5/13				

Date	Topic	Invited Guest	Assignments (Team)	Assignments (Paper)
5/15			T3 Due; T4 Assigned: Final Presentation	P3 Drafts Due for Peer Feedback Exercise; P4 Assigned: Final Presentation
Week 8 NMT Emerging Topics & International cases				
5/20	Electrification	Armand Shahbazian (SDOT), Chris Robertson (SCL)		
5/22	International Cases			
Week 9 NMT & Institutions				
5/27	World Cup Planning		T4 Draft Slides Due	P3 Peer Feedback and Draft Paper Due
5/29	NMT & Institutions	Jamie Cheney, Transportation Director, Seattle Children's Hospital		
Week 10 Final Project Showcase				
6/3	Paper presentations	UDP Faculty		P4 Due: Final Presentation
6/5	Team presentations	SDOT Personnel	T4 Due: Final Presentation	
Week 11 Finals Week				
6/10	Final work due		T5 Due: Final Report	P5 Due: Final Paper

Academic Conduct and Accommodations

Academic Integrity

The University of Washington expects students to know their responsibilities and maintain the highest academic conduct standards (WAC 478-121). Students are held responsible for any violation of the University of Washington Student Code, irrespective of whether the violation was intentional or not. Students suspected of cheating or otherwise violating the misconduct code will be referred to the College disciplinary process.

Plagiarism

Plagiarism is using another person's words or ideas without proper citation. Plagiarism is considered a form of cheating at the University of Washington and can result in disciplinary action, including dismissal from the university. If you are unsure of what plagiarism is or how to avoid it, please consult your instructor.

For more information on academic responsibility, including plagiarism and other forms of cheating, see <http://depts.washington.edu/grading/pdf/AcademicResponsibility.pdf>.

Academic Accommodations

Your experience in this class is important to me. If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest

convenience to discuss your needs in this course.

It is the policy and practice of the University of Washington to create accessible learning environments consistent with federal and state law, including establishing reasonable accommodations for all students. If you have already established accommodations with Disability Resources for Students (DRS), please activate them via myDRS so we can discuss how they will be implemented in this course.

If you have not yet established services through DRS, and you have a temporary health condition or permanent disability that requires accommodations, contact DRS directly (disability.uw.edu) to set up an Access Plan. DRS facilitates the interactive process that establishes reasonable accommodations. Conditions requiring accommodation include but are not limited to: mental health, attention-related, learning, vision, hearing, physical or health impacts.

Religious Accommodations

Washington state law requires that UW develop a policy for accommodating student absences or significant hardship due to reasons of faith or conscience or for organized religious activities. The UW's policy, including more information about requesting an accommodation, is available at [Religious Accommodations Policy \(https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/\)](https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request Form \(https://registrar.washington.edu/students/religious-accommodations-request/\)](https://registrar.washington.edu/students/religious-accommodations-request/).

Use of AI

In this course, students are permitted to use AI-based tools (such as ChatGPT) on some assignments. The instructions for each assignment will include information about whether and how you may use AI-based tools to complete the assignment. All sources, including AI tools, must be properly cited. Detailed citation guidelines can be found at [UW Law Library](#), [MIT Libraries](#), and [UMD Libraries](#). Using AI in ways inconsistent with the parameters above will be considered academic misconduct and subject to investigation.

Please note that AI results can be biased and inaccurate. It is your responsibility to ensure that the information you use from AI is accurate. Additionally, pay attention to the privacy of your data. Many AI tools will incorporate and use any content you share, so be careful not to unintentionally share copyrighted materials, original work, or personal information.

Learning how to thoughtfully and strategically use AI-based tools may help you develop your skills, refine your work, and prepare you for your future career. If you have any questions about citations or about what constitutes academic integrity in this course or at the University of Washington, please feel free to contact me to discuss your concerns.

Posting Course Materials Online

Do not share any course materials (lectures, lecture notes, recordings, assignments, quizzes, exams) posted to the class Canvas site. These materials are protected by U.S. copyright law and by [University policy](#) and may not be reproduced, distributed, displayed, posted, or uploaded without written permission from the instructor. If you do so, you may be subject to academic misconduct proceedings under the [UW Student Conduct Code](#).

Safety

If you feel unsafe or at-risk while taking this or any course, please contact [SafeCampus](#), 206-685-7233 anytime, where you can anonymously discuss safety and well-being concerns for yourself or others. SafeCampus can provide individualized support, discuss short- and long-term solutions, and connect you with additional resources when requested. For a broader range of resources and assistance, see the [Husky Health & Well-Being](#) website.

Recording Classes

You must have my permission to record class sessions unless your request has come through DRS