

## **USP 548: Public Transportation Planning - Spring 2024 (CRN: 63598)**

In-class meetings - Mondays 1:00 – 3:40 p.m. - Urban Center room 220

**Professor: Aaron Golub;** Email: [agolub@pdx.edu](mailto:agolub@pdx.edu)

Virtual Office Hours (Google Meets from Calendar invite): *Times vary weekly - By appointment through my appointment scheduler:* <https://tinyurl.com/Golub-Appts>

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### **COURSE DESCRIPTION**

Public transit ridership and investments have been growing for the past two decades as regions around the world grapple with worsening congestion, growing concerns about climate change, health, and social equity, and a reinvigoration of urban living and sustainable lifestyles. Since the pandemic, trends have shifted, with significant declines in ridership on mainline systems alongside new approaches to service delivery via “microtransit” models leveraging new technologies and rider behavior. This course will introduce students to processes and policies concerning the planning of public transit systems and the development of new transit investments, focusing on buses and light rail.

The course will explore the following concepts and skills:

- basic engineering and operations issues as they pertain to questions of planning
- tradeoffs for different approaches to service frequency, route, stop location, vehicle sizes
- emerging “microtransit” service models
- fare policies, technologies and understanding the equity and efficiency of these options
- public transit ridership and how to estimate it and policies and planning approaches to increase it
- understanding transportation disadvantage, the need for transit, the social equity impacts of transit, and disparate impact analysis
- understanding a typical major investment sketch-planning evaluation
- reviewing the NEPA environmental, social and economic impact assessments for new transit investments
- bike and pedestrian access and design
- transit oriented development planning principles and analysis of impacts on transit use

### **COURSE MATERIALS AND ASSESSMENTS**

There is *no textbook* for the course. The CANVAS site contains all assignments and required and optional readings. Materials are organized by unit and within each are readings, videos, assignment folders. The course will include one required class meeting per week, required and optional readings, smaller outside assignments, and one quarter-long project. The small class size will make it imperative that everyone completes the readings and the assignments, as we will engage in detailed discussion and debate during class meetings. Note that two sessions will be held online.

### **ASSIGNMENTS AND GRADING**

Assignments will be judged for their coherence, connection to the class materials, clarity in writing and documentation. Make sure you cite all references and sources of data; include a list of references at the end of your assignments if necessary. Each assignment will have a more specific grading rubric. All assignments should be uploaded as a TEXT, Word or PDF file into the dropbox on the CANVAS website for the class. Please consult the CANVAS site for assignment deadlines, as they sometimes change. Please also have the assignments accessible during class meetings as they will likely be discussed. The final grade will be calculated from weighting the assignments in the following manner:

- **Short Assignments (50%):** There will regular assignments to accompany each unit.
- **Occasional discussion boards and weekly attendance in class (20%):** Attendance at class sessions is required. Please let Dr. Golub know if an emergency will prevent you from attending.
- **Major Assignment – Ridership/cost/NEPA evaluation (30%):** The major assignment will be carried out in pieces in the second half of the quarter.

**Final Grading Scale:** A 94.0 % and above; A- 90.0 % to 93.99%; B+ 87.0 % to 89.99%; B 84.0 % to 86.99%, B- 80.0 % to 83.99%, etc.

### **Note on submitting work online**

Proficiency in the use of Canvas, PSU email, and other computer tools such as ZOOM or parts of google suite is required for this course. This course requires consistent access to functioning computer equipment and Internet access throughout the length of the course. Reliance on a cellular connection may not provide reliable and fast access to online learning resources. Here are some broadband programs that are free or low-cost:

<https://www.highspeedinternet.com/resources/are-there-government-programs-to-help-me-get-internet-service>

### **ACADEMIC INTEGRITY**

Students are expected to be ethical not only in the classroom, but also outside 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 me if you ever have any questions about how to cite your work.

### **CAMPUS SUPPORT FOR RESPONDING TO HARASSMENT OR DISCRIMINATION**

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:

**Albert Roberson**, Title IX Coordinator - [titleixcoordinator@pdx.edu](mailto:titleixcoordinator@pdx.edu)

Richard and Maureen Neuberger Center (RMNC), 1600 SW 4th Ave., Suite 830

**Taylor Burke**, Deputy Title IX Coordinator and Dean of Students - 503.725.4422 - [askdos@pdx.edu](mailto:askdos@pdx.edu)

Smith Memorial Student Union (SMSU), 825 SW Broadway, Suite 433

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.

### **ACCESS AND INCLUSION FOR STUDENTS WITH DISABILITIES**

PSU values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, useable, inclusive, and welcoming. If any aspects of instruction or course design result in barriers to your inclusion or learning, please notify me. The

Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment.

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. The DRC is located in 116 Smith Memorial Student Union, 503-725-4150, [drc@pdx.edu](mailto:drc@pdx.edu), <https://www.pdx.edu/drc>.

- If you already have accommodations, please contact me to make sure that I have received a faculty notification letter and discuss your accommodations.
- Students who need accommodations for tests and quizzes are expected to schedule their tests to overlap with the time the class is taking the test.

### **DIVERSITY, EQUITY AND INCLUSION**

The USP Belonging, Justice and Dignity Committee identifies [a variety of ways for students to give feedback, seek assistance, and report a problem](#) (focused on issues related to Diversity, Equity and Inclusion).

[Portland State University Prohibited Discrimination and Harassment Policy](#) - addresses the definition of discrimination and harassment and provides appropriate contacts for reporting cases.

The Office of the Dean of Student Life hosts the Academic Appeals process. Students who feel they have received a prejudiced or capricious academic evaluation may submit an [Academic Appeal Request](#). Before students submit this request, students must have appealed to the instructor (Aaron Golub), department chair (Greg Schrock) and CUPA dean (Jennifer Allen). Students should then read the [Academic Appeals Guidelines](#) to see if their grade dispute fits the purview of the Academic Appeal. For more information please visit the [Academic Appeals website](#), email [askdos@pdx.edu](mailto:askdos@pdx.edu), or call 503-725-4422.

For information about emergency preparedness, please go to the Fire and Life Safety webpage (<https://www.pdx.edu/environmental-health-safety/fire-and-life-safety>) for information.

### **SYLLABUS DISCLAIMER**

All syllabi are subject to minor changes to meet the needs of the instructor, 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.

**Spring 2024 CALENDAR**

<b>Date</b>	<b>Title</b>	<b>Subjects</b>
4/1	Transit concepts and definitions	Intro, definitions, service types, rights of way, technologies
4/8	Transit operations, capacity, and reliability	In-street operations in mixed traffic, signals and signal priority, right-of-way operations
4/15	Route, network and service planning	Network 'types', tradeoffs between route length/travel time, frequency/headway, layover/recovery and transfers, fleet size
4/22	Networks part 2	In-class network planning exercise with Jarrett Walker and Associates
4/29	Social need for transit	Transportation disadvantage, social equity, planning for access, accessibility measures
5/6	Transit planning and policy and environmental review part 1	Review of local, regional, state and federal policy; Overview of the tiered planning calendar for major investments
5/13	Environmental review part 2	
5/20	Transit finance, fares, labor and contracting	Expenses, revenues, grants, fare policies (technologies, media), debate over privatization
5/27	Urban design for access to transit, TOD	Intermodal access to transit facilities; Principles of transit oriented design, development and planning
6/3	Student team NEPA review presentations	Final wrap-up