CP 4310: Urban Transportation and Planning

Summer 2026

(Subject to Change)

Instructor

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Teaching Assistant

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Course Goals and Learning Objectives

This course is designed to introduce the fundamentals of urban transportation planning and is applicable to students in a variety of concentrations of study. It is meant to motivate students to take the information learned and put it into practice in their future careers (whether they are related to transportation planning or not) as well as their day to day lives.

Course Policies

1. Respect yourself and others
2. Stay open minded
3. Watch videos, participate in discussions, complete readings, and submit assignments on time
4. Follow the Georgia Tech Honor Code
5. Use of AI Chatbots - You are welcome to use AI tools to assist in brainstorming ideas, but you may not submit any work generated by a bot as your own. Relying on AI can be problematic as it is often inaccurate, can limit your own ideas and analysis, can take longer than doing an analysis or response on your own, and stifle learning. Georgia Tech's policy on plagiarism will be in effect.
6. Communicate and reach out to the professor or TA with any questions / concerns

Support

- In this class everyone will be treated fairly, regardless of national identity, language, background, disability, socioeconomic status, race, religion, sexual orientation, gender identification, or age. There will be no tolerance for hate speech, verbal abuse or language that discriminates against others based on their identity. I am committed to creating a safe space where open dialogue, reflection and critical thinking are encouraged.
- It is important to take care of your mental health throughout your college career. If you would like professional and confidential support, you can contact the university's Center for Mental Health Care and Resources.
- Students who need support for educational barriers and reasonable accommodations can reach out to the Office of Disability Services.

Canvas

Announcements, resources and readings/discussions/assignments will be shared in Canvas. **There are no textbooks for this course****. All readings assigned will be taken from books, blogs, reports, articles, etc. and will be made available as the semester progresses. Assignments, due dates and other aspects of the course may change throughout the semester. Students will be notified when this takes place.

Grading Components		
Participation	30%	Students are expected to participate in class. This will include discussions in Canvas and attending live (virtual) office hours. The field of urban planning and transportation are interdisciplinary and require engaging with colleagues as well as critical stakeholders.
Assignments	30%	Assignments throughout the semester will be based on videos, readings, events, design analyses, and field work. These must be submitted in Canvas by 5:30 pm EDT on the date they are due. Each day late will be a deduction of 10% of the assignment's grade. After three days, the assignment will be given a 0. Unless you have an official Georgia Tech exception, this policy is in effect.
Midterm	20%	Mini transportation study.
Final	20%	Debate style presentations on different issue areas (in groups). These will take place live (virtually).

Grading Scale		
Letter Grade	**Percentage**	**Criteria**
A	90-100%	High quality, professional work.
B	80-89%	Mostly meets expectations, but not up to professional quality.
C	70-79%	Assignment has been completed but writing is not clear and/or disorganized or the information is incorrect.
D	60-69%	Serious shortfall in meeting the assignment's expectations.
F	0-59%	Usually only possible if nothing is handed in.

Semester Schedule

This schedule is subject to change based on the evaluation of students' content comprehension, guest speaker schedule shifts, and unforeseen external factors.

Week	Dates items will be uploaded to Canvas	Topic
1	May 19 / May 21	Overview - urban transportation planning, history and major challenges
2	May 26 / May 28	Modes and systems
3	June 2 / June 4	Infrastructure - street design, health and safety
4	June 9 / June 11	Land use - zoning, highway design, transit oriented development, gentrification
5	June 16 / June 18	Data - methods and mapping Transportation engineering - operations, demand forecasting
6	June 23 / June 25	**MIDTERMS DUE**
7	June 30 / July 2	Transportation planning process - steps, stakeholders and government requirements Project evaluation – lessons learned, scalability and replicability
8	July 7 / July 9	Policy and funding - public, private, non-profit
9	July 14 / July 26	Resilience and sustainability
10	July 21 / July 23	Equity - impacts due to racism, classism, ableism, sexism and more
11	July 28 / July 30	Technology - Digitization, automation, internet of things
12	August 3 – August 6	**FINALS**

Further Reading**

The following books are recommended to students if they wish to expand their understanding of the subject beyond this course. They have been chosen because of their connection to urban transportation and some assignments and readings for the class will be pulled from these materials. There are an infinite number of books on this topic - this is only a sampling and are **NOT** required for this course.

- Inclusive Transportation: A Manifesto for Repairing Divided Communities by Veronica Davis
- Crabgrass Frontier: The Suburbanization of the United States by Kenneth T Jackson
- When Driving Is Not an Option: Steering Away from Car Dependency by Anna Letitia Zivarts
- Death and Life of Great American Cities by Jane Jacobs
- The Power Broker by Robert Caro
- Cities Back from the Edge: New life for downtown by Roberta Brandes Gratz
- Killed by a Traffic Engineer: Shattering the Delusion that Science Underlies our Transportation System by Wes Marshall
- City Limits: Infrastructure, Inequality, and the Future of America's Highways by Megan Kimble
- The High Cost of Free Parking by Donald Shoup
- 20th-Century Sprawl: Highways and the Reshaping of the American Landscape by Owen Gutfreund
- City On The Verge: Atlanta and the fight for America's Urban Future by Mark Pendergrast
- Walkable City: How Downtown Can Save America, One Step at a Time by Jeff Speck
- The Image of the City by Kevin Lynch
- Design of Cities by Edmund Bacon
- How to Lie with Maps by Mark Monmonier