CP 8990 Applied Research Paper (Urban Design)

Fall 2026 – Spring 2027

Instructor Information

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Course Description

The Applied Research Paper (ARP) in Urban Design is a substantial, independent scholarly paper completed over two semesters. It demonstrates the student's mastery of urban design inquiry, spatial analysis, and design research methods as applied to a self-selected topic within the built environment. Research topics typically engage questions at the intersection of urban form, public space, ecological systems, mobility infrastructure, human perception, or community resilience. All work must be grounded in scholarly literature and appropriate design research methods.

Course Structure

Register for 2 credits in the Fall semester and 2 credits in the Spring semester. If you would like to do something different, you should ask the instructor in advance, explaining why an alternative registration might be appropriate. The assignments and grading weights below are predicated on a 2/2 credit registration regardless.

Fall Semester Grading

- Brief Proposal on 2–3 Topics – 10%
- Detailed Workplan and Bibliography – 20%
- Draft Proposal – 70%

Spring Semester Grading

- Preliminary Results Described – 10%
- Full Draft Paper – 20%
- Final Paper – 70%

Writing Guidance

Professional quality writing is a significant focus of the ARP. All "drafts" should meet a minimum standard of quality. They should be thoroughly reviewed by the writer; having an external editor (a colleague or peer) is strongly recommended. If English is not your first language, you may require more frequent and extensive assistance from an editor.

Stylistic requirements are outlined in the SCaRP Writing Guide (MCRP Student Manual). Please review this guide in detail before commencing any writing for this course.

Recommended Reading

1. Batty, Michael, 2018, Inventing Future Cities, MIT Press.
2. Lynch, Kevin, 1981, Sense, in Good City Form, MIT Press.
3. Yamagata, Y. & Yang, P. P.-J. eds. 2020, Urban Systems Design: Creating Sustainable Smart Cities in the Internet of Things Era. Elsevier, 2020.
4. Yang, P. P.-J. & Yamagata, Y., 2019, Urban systems design: from "science for design" to "design in science." Environ. Plan. B Urban Anal. City Sci. 46, 1381–1386.

Institutional and Administrative Policies

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit the Georgia Tech Academic Honor Code. Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, which will investigate the incident and can impose academic sanctions.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (ODS) at (404) 894-2563 or visit them at Smithgall Student Services Building, Suite 2-230. Once you have your accommodation letter, please meet privately with the instructor to discuss the accommodations that have been requested. For more information, visit Georgia Tech Office of Disability Services.

Student–Faculty Expectations

Georgia Tech expects a quality experience for both students and faculty. Students can expect that the instructor will be professional, prepared, and provide feedback in a timely manner. The instructor expects students to be prepared, to participate in class activities, and to uphold the standards of the Georgia Tech community. Communication between students and instructor should be professional, respectful, and timely. For the full statement on student–faculty expectations, see the Student–Faculty Expectations Agreement.

Generative AI Use Policy

Students may use generative AI tools (such as ChatGPT, Copilot, or similar) only for tasks explicitly approved by the instructor. Undisclosed use of AI-generated content submitted as your own work may be treated as an academic integrity violation. When AI tools are approved for use, students must document their use clearly in submitted work. The goal of this course is to develop your own analytical and design capabilities; AI tools may support, but should not replace, your own reasoning and judgment.

Institute Approved Absences

Georgia Tech recognizes certain types of excused absences, including absences for Institute-approved activities, military service, and serious illness. Students who anticipate missing class for Institute-approved activities should notify the instructor at least one week in advance and provide documentation. Students are responsible for any material missed during an absence. See the Georgia Tech Academic Regulations on Attendance for full details.