

CP2233 Syllabus

Sustainable Urban Development, JG, 3 Credits

Summer 2026

Instructor Information

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General Course Information

Description

The objective of this course is to introduce students to the theory and practice of the challenges of sustainable development (aka sustainability) as applied to the built environment and its interconnectivity with the natural environment. It addresses a range of specific sustainability-related issues such as sprawl and smart growth, climate change, transportation, social equity and environmental justice, food systems, and community engagement.

Since 2008, the global urban population outnumbered the rural population and according to the UN, it is expected that by 2050 two-thirds of the world population will be living in cities that will generate 70 percent of the world's gross domestic products. People living in urban areas consume an enormous number of resources including energy, water, food, and many other materials, as well as generate massive amounts of waste and pollution. All of this puts massive pressure on resources and ecosystems; furthermore, the growing demand from cities will create more challenges to the limited earth resources. As such, it is necessary a new approach in urban thinking and planning defined as "sustainable urban development".

As defined by the Brundtland Commission in 1987, "sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Based on this approach, this course will familiarize students to sustainable urban development from a more inclusive three-dimensional perspective that places equal weight on environmental preservation, economic prosperity, and social equity. This approach will provide students with the tools needed to create healthy, livable, and prosperous human environments for present and future generations with minimum demand on resources and minimum impact on the environment.

Course Learning Outcomes

By the end of the course students will have accomplished the following:

1. Define Sustainable Urban Development (SUD) at the local and regional level and describe the relationships between the natural environment, economic prosperity, and social equity.
2. Describe the challenges of urban and regional settings including their negative impact on climate change and other environmental and social issues and how sustainable cities and regions can provide significant solutions to all these challenges.
3. Use methods and tools available to make urban and regional setting sustainable.
4. Develop basic solutions based on the concepts learned in class.

Required Course Materials

- *Sustainability: A Comprehensive Foundation (SCF)* Edited by Tom Theis and Jonathan Tomkin Rice, University, (2012). Available from the course Canvas site and from an Internet search.
- *Smart Sustainable Cities of the Future (SCOF)* by Simon Elias Bibri. Springer (2018). Available from the course Canvas site and from an Internet search
- *Second Assessment Report on Climate Change and Cities (ARC3.2) (2018)*. Available online: <https://uccrn.ei.columbia.edu/arc3.2>Links to an external site.

Recommended Readings:

- *Where We Want to Live* –by Ryan Gravel. St. Martin’s Press (2016). Available as a book in the library.
- *Triumph of the City* – by Edward Glaeser. Penguin Group (2011). Available as a book in the library.
- *The New Urban Crisis* – by Richard Florida. Basic Books (2017). Available online in the library.

Grading Policy:

Category	Points	Weight
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Course Engagement (answer to one weekly question - 20 points each week. Total weeks – 10. 20 points x 10 = 200)	200	20%
Assignment 1 - Blog #1	100	10%
Assignment 2 – Blog #2	100	10%
Assignment 3 – Blog #3	100	10%
Assignment 4 - Individual Final Paper & Presentation	100	10%
Assignment 5 - Team Final Paper and Presentation <ul style="list-style-type: none"> • Draft= 50 points • Final Presentation = 50 points • Final Paper = 200 points • Total = 300 points 	300	30%
Final Exam	100	10%
Total	1000	100%

Grading Scale

Your final grade will be assigned as a letter grade according to the following scale:

- A 90-100%
- B 80-89%
- C 70-79%
- D 60-69%
- F 0-59%

Description of Graded Components

-Course Engagement – Weekly attendance and/or Participation (200 points)

Course engagement is very important as they contribute to the overall learning and enjoyment of the class.

Institute-excused absences should be communicated at least 48 hours ahead of time, via email, to the instructor.

To earn full credit for course engagement, students must:

- Answers to one weekly question every week (10 points)
- Reply to two classmates' responses (5 points each = 10 points per week)
- Total points per week = 20 points
- Total number of weeks = 10
- Total Course Engagement Points = 20 points per week x 10 weeks = 200 points

Important:

- All posts must be at least 100 words minimum (including citations but not references in the count)
- All posts must provide new content to the discussion – by simply agreeing or disagreeing without a substantial explanation does not provide new content to the discussion
- Statements must be supported with academic valid citations following APA guidelines and the respective references
- A guideline for valid academic citations can be found here:
<https://psychology.ucsd.edu/undergraduate-program/undergraduate-resources/academic-writing-resources/writing-research-papers/appropriate-references.html>

-Blogs (300 points)

- Students are required to write three blogs during the semester – Due dates for the blogs are below.
- All blogs must be related to the discussions in class.
- Blogs must be at least 300 words (including citations but not references in the count)
- Blogs must be supported with citations and references following APA guidelines
- A guideline for valid academic citations can be found here:
<https://psychology.ucsd.edu/undergraduate-program/undergraduate-resources/academic-writing-resources/writing-research-papers/appropriate-references.html>

-Individual Final Paper & Presentation (100 points)

Students are required to choose an extracurricular activity related to SUD, prepare a presentation, and write a paper. Examples of extracurricular activities are working on a voluntary SUD project, attending a SUD event, or interviewing an official working in SUD. Students are required to prepare a PowerPoint of the activity, as well as write and submit in Canvas a two-page paper (not including title page, references, or appendixes; one-half spaced; 12 fonts; APA guidelines).

-Teams Final Paper & Presentation (300 points)

Student will be randomly assigned to a team of 4-5 members.

Teams are required to research a SUD City (paper and presentation).

Each one of the students will be required to complete an evaluation form for members of her/his team, including themselves.

The earned grades for the presentation will be an average among the quality of the presentation, the quality of the report, and the team-group evaluation form.

The paper and presentations should be submitted on Canvas. The paper should be a minimum of 1,500 words (one-and-a-half spaced, 12 font) using APA Style guidelines. Presentations should be a maximum of 10 slides. All slides must be self-explanatory, include limited by clear text, and real pictures or relevant graphics. Text must be supported with APA citations and figures must be labeled following APA guidelines.

- Final Exam (100 points)

The Final Exam will be administered via Canvas. The exam material will be drawn from the assigned readings, lectures, and discussions. The exam will consist of two sections: short answer and essay. Approximately one week prior to an exam, the instructor will distribute a list of key concepts to focus study.

Course Policies

Attendance and/or Participation

Participation is very important as they contribute to the overall learning and enjoyment of the class.

Institute-excused absences should be communicated at least 48 hours ahead of time, via email, to the instructor.

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. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. Articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Use of Generative AI

If you choose to use **Generative Artificial Intelligence** software (for example ChatGPT, Bard, Microsoft Copilot, etc.) in completing ANY assignments for this class, you must include a proper reference in your work. If you choose to use precise language generated by the software, you must quote it. The reference must include the website and specific prompts used to generate the referenced output. For an example of how to reference, you may want to consult APA.

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

Assignments turned in after the specified due date will incur a grade penalty according to the following schedule:

- Within 24 hours of original due date: 10% deduction off the final grade
- Between 24-48 hours of original due date: 20% deduction off the final grade
- Between 48-72 hours of original due date: 30% deduction off the final grade
- **After 72 hours the grade will be zero for the assignment.**

Campus Resources for Students

Undergraduate Student Academic Success Resources:

- Academic Support: Academic Success and Advising (a unit in the Office of Undergraduate Education & Student Success) provides free support for your courses. Students can attend scheduled supplemental review (PLUS) sessions, stop by Drop-In Tutoring, or schedule a one-on-one appointment through Knack. To explore what options work best for you, please visit us online at success.gatech.edu/tutoring, email us at tutoring@gatech.edu, or come see us at Clough Undergraduate Learning Commons, Suite 283.

Graduate Student Academic and Professional Success Resources:

A list of resources for graduate students is given on the [Office of Graduate and Postdoctoral Education](#) website. Specific information for [current graduate students](#) includes

- [Academic Resources](#) such as the Communications Center, Language Institute, Library, Catalog, Registrar, resources for conducting research, Advocacy and Conflict Resolution resources, and how to manage unexpected situations that may impact your academic performance;
- [Student Resources](#) such as Campus Services, Child Care/Family programs, Health & Wellness, Career Services, and the Student Resource Guide; and
- [Professional Development](#) such as the programming from the Career Center and other professional development resources and events”

Student Well-Being:

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A [comprehensive list](#) of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being ([student-resource-guide \(gatech.edu\)](#))