SUMA PS5530 - The Urbanization Paradox: Crisis and Opportunity for Global Sustainability

Instructor:  Steven Caputo Jr.
Contact:  Response to emails within 48 hours

Course Overview

The world is witnessing one of the most dramatic environmental and demographic transformations of all time. At the start of the twentieth Century, only 15% of people lived within densely built environments, while most others inhabited agrarian or natural landscapes. Today, 55% of the global population is urbanized and by 2050 that number will reach 75%, for a total of six billion urban dwellers. Cities now produce more than 80 percent of global GDP, consume two-thirds of all energy, generate 70 percent of greenhouse gas emissions, and are disproportionately impacted by climate change and coastal risks. It is an understatement to say that global sustainability will succeed or fail in cities.

The goal of this course is to confront what has been called “the paradox of urbanization.” On the one hand, the surging growth of urban areas is devouring land and natural resources, destroying biodiversity, and exposing billions of people to hazardous conditions. On the other hand, researchers, policy makers and activists are looking towards cities as the nexus of sustainable living. Urban dwellers live more efficiently, have wider access to resources, and drive innovation. So can the urbanization paradox be resolved sustainably?

This course will employ a range of analytical and interpretive frameworks to address this question. Through lectures, in-class discussions, extensive reading, and the preparation of a semester long case study, students will develop a strong and nuanced understanding of the causes, impacts, and opportunities of global urbanization. Particular focus will be given to the emerging “science of urbanization” and to multi-disciplinary research, field work, and policy-making. Students will have the opportunity to conduct in-depth analysis of a single city of their choice and gain high-level exposure to numerous other cities through class discussion and presentations. By the end of the course, students will acquire the analytic skills and critical thinking to contribute to the challenging pursuit of global urban sustainability.

Course Schedule

PART I. URBANIZATION THEORY AND PRACTICE
• Session 1 (May 24): Introduction
• Session 2 (May 31): Theories of Urbanization
• Session 3 (June 5): Drivers of Urbanization and Global Environmental Change
• Session 4 (June 7): Special Panel Discussion: “On Fieldwork”
• Session 5 (June 14): The Promise and Limits of Urban Reform

PART II. CRITICAL ISSUES
• Session 6 (June 21): Land Use and Mobility
  * No class on June 28
• Session 7 (July 5): Climate Change
• Session 8 (July 12): Water
• Session 9 (July 19): Energy

PART III. CASE STUDIES & SYNTHESIS
• Session 10 (July 26) Case Studies
• Session 11 August 2): Case Studies
• Session 12 (August 9): Synthesis
Learning Objectives

By the end of this course students will be able to:

- Understand and discuss the primary drivers and impacts of rapid urbanization
- Acquire rigorous diagnostic skills and comparative frameworks to evaluate urbanization challenges and opportunities
- Critically assess and proposed policies, programs, and proposals that are aimed at promoting urban sustainability

Course Assignments

Annotated Bibliography (10%): Students will select a city and create an annotated bibliography with at least 10 sources that they will use as part of their research. Cities should be selected from one of the following regions unless otherwise approved by the instructor: South and Central America; East, South, and Southeast Asia; Sub-Saharan African and the Greater Middle East.

Case Study Proposal (15%): Students will submit a two-page proposal that describes the objectives / key questions of their case study. The case study should utilize the DPSIR Framework (Driving Forces – Pressures – State – Impacts – Responses).

Case Study Presentation (15%): Students will present their case study proposal and selected city in a 10-minute slide presentation followed by a 10-minute Q&A.

Final Case Study (50%): Students will submit a 10 to 15-page paper (with appendices as necessary) that utilizes the DPSIR framework to assess an urban/environmental challenge in their chosen city.

Evaluation/Grading

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Evaluation criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>10 Points</td>
<td>Each student will be evaluated for the frequency and quality of her/his contributions to class discussions. Students are expected to attend all sessions unless approved by instructor.</td>
</tr>
<tr>
<td>Annotated Bibliography</td>
<td>10 Points</td>
<td>Points will be awarded as follows: 3 points for completing the assignment with the required number of sources and annotations; up to 3 points for the range and depth of the selected sources; up to 4 points for the clarity and thoughtfulness of the annotations.</td>
</tr>
<tr>
<td>Case Study Proposal</td>
<td>15 Points</td>
<td>Points will be awarded as follows: 5 points for completing the case study proposal on time; up to 5 points for describing the objective and relevance of the case study; up to 5 points for describing the research plan and possible range of findings.</td>
</tr>
<tr>
<td>Case Study Presentation</td>
<td>15 Points</td>
<td>Points will be awarded as follows: 5 points for completing the presentation; up to 5 points for the quality and organization of the presentation visuals; up to 5 points for the brevity, clarity and persuasiveness of the spoken presentation.</td>
</tr>
<tr>
<td>Final Case Study</td>
<td>50 Points</td>
<td>Points will be awarded as follows: 20 points for completing the case study on time; up to 20 points for the quality of the analysis and for utilizing key concepts from the course; up to 20 points for the clarity and persuasiveness of the findings and recommendations.</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100 Points</strong></td>
<td>The following clarifies how points awarded to individual assignments translate into letter grades for the course: A+ is for extraordinary work (&gt;96 points); A= 93-96 points; A-=90-92 points; B+=87-89, B= 83-86, B-=80-82, C+=77-79, C=73-76, C-=70-72, D+=67-69, D= &lt;67</td>
</tr>
</tbody>
</table>
Course Policies

*Attendance and Participation:* On-time attendance at each class meeting is expected. Partial attendance, i.e. lateness or early departure, if not excused in advance, will negatively impact the class participation portion of the course grade. You are expected to do all assigned readings, attend all class sessions, and engage with others in online discussions.

*Late work:* Late work will be accepted with a 15% reduction unless otherwise approved by the instructor prior to the due date.

*Citation & Submission:* All written assignments must cite sources using the Chicago style. Submit assignments through Canvas.

School Policies

*Copyright Policy*
Please note -- Due to copyright restrictions, online access to this material is limited to instructors and students currently registered for this course. Please be advised that by clicking the link to the electronic materials in this course, you have read and accept the following:

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

*Academic Integrity*
Columbia University expects its students to act with honesty and propriety at all times and to respect the rights of others. It is fundamental University policy that academic dishonesty in any guise or personal conduct of any sort that disrupts the life of the University or denigrates or endangers members of the University community is unacceptable and will be dealt with severely. It is essential to the academic integrity and vitality of this community that individuals do their own work and properly acknowledge the circumstances, ideas, sources, and assistance upon which that work is based. Academic honesty in class assignments and exams is expected of all students at all times. SPS holds each member of its community responsible for understanding and abiding by the SPS Academic Integrity and Community Standards posted at [http://sps.columbia.edu/student-life-and-alumni-relations/academic-integrity-and-community-standards](http://sps.columbia.edu/student-life-and-alumni-relations/academic-integrity-and-community-standards). You are required to read these standards within the first few days of class. Ignorance of the School's policy concerning academic dishonesty shall not be a defense in any disciplinary proceedings.

*Accessibility*
Columbia is committed to providing equal access to qualified students with documented disabilities. A student’s disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website: [http://health.columbia.edu/services/ods/support](http://health.columbia.edu/services/ods/support).

Readings

A textbook will not be required for this course. All readings are listed in the Course Schedule section of this syllabus and will be posted to Canvas or available online. “Required” readings are to be read BEFORE coming to class. Additional readings, listed as “For Reference / Further Reading” are also provided for enrichment and to provide context for class discussion.

Resources

*Columbia University Library*
Columbia’s extensive library system ranks in the top five academic libraries in the nation, with many of its services and resources available online: [http://library.columbia.edu/](http://library.columbia.edu/).

*SPS Academic Resources*
The Office of Student Life and Alumni Relations (SLAR) provides students with academic counseling and support services such as online tutoring and career coaching: [http://sps.columbia.edu/student-life-and-alumni-relations/academic-resources](http://sps.columbia.edu/student-life-and-alumni-relations/academic-resources).
Readings

PART I. URBANIZATION THEORY AND PRACTICE

SESSION 1
May 24 - Introduction

Required reading


For reference / further reading


SESSION 2
May 31 - Theories of Urbanization

Required reading


For reference / further reading

SESSION 3
June 5 or 6 - Drivers of Urbanization and Global Environmental Change

**DUE: Case Study City and Issue selection

Required reading:


For reference / further reading


SESSION 4
June 7 - Special Panel Discussion: “On Fieldwork”

WomenStrong International is a consortium of non-governmental organizations in five countries dedicated to eradicating extreme urban poverty by enabling women and girls to live healthy, fulfilling lives.

Dr. Susan M. Blaustein
Founder, WomenStrong International
https://www.womenstrong.org/people/susan-blaustein
https://www.womenstrong.org/

M.P. Vasimalai (“Vasi”)
Founder and Executive Director of DHAN Foundation
Madurai District, Tamil Nadu, India
https://www.womenstrong.org/people/m-p-vasimalai-vasi
https://www.womenstrong.org/projects/dhan-foundation-empower-womenstrong-madurai

Abenaa Akuamoa-Boateng
Executive Director, Women’s Health to Wealth
Kumasi, Ghana
https://www.womenstrong.org/people/abenaa-akuamoa-boateng
https://www.womenstrong.org/projects/women-s-health-to-wealth

Beldina Opiyo
Founder and Director, Alice Visionary Foundation Project
Kisumu, Kenya.
https://www.womenstrong.org/people/beldina-opiyo-omolo
https://www.womenstrong.org/projects/alice-visionary-foundation-project

Required reading
Speaker bios and organizational descriptions linked above.

SESSION 5
June 14 - The Promise and Limits of Urban Reform

**DUE: Annotated Bibliographies**


For reference / further reading


PART II. CRITICAL ISSUES

SESSION 6
*June 21 - Land Use and Mobility*


Hossein Haghshehnas and Manouchehr Vaziri, “Urban sustainable transportation indicators for global comparison.” Ecological Indicators. Volume 15, Issue 1, April 2012.

Bakogiannis: Case Studies and Sustainable Urban Mobility Research Schemes: A Communication Channel Among Researchers and Interdisciplinary Community Groups

Recommended Readings


SESSION 7
July 5 - Climate Change
**DUE: Case Study Proposals

Required reading:


Recommended Readings


SESSION 8
July 12 - Water


*For reference / further reading*


**SESSION 9**
**July 19 - Energy**


UN Habitat, United Nations Environment Programme (UNEP) and ICLEI Local Governments for Sustainability. *Sustainable Urban Energy Planning: A handbook for cities and towns in developing countries.* UN Habitat, 2009


*Recommended Readings*


**SESSION 10**
**July 26 - Case Study Presentations (3 hours)**

No Required Readings

**SESSION 11**
**August 2 - Case Study Presentations (3 hours)**

No Required Readings

**SESSION 12**
**August 9 - Synthesis**

