Planet of Cities:
Evidence-Based Policy Responses to Global Urbanization

Draft: 15 June 2018

Instructor: Dr. Shlomo Angel, Professor of City Planning
Associate Instructors: Alejandro Blei and Maria Monica Salazar, Research Scholars
Teaching Assistant: [To be determined]
Office Address: The Marron Institute of Urban Management
60 Fifth Avenue, 2nd Floor
New York, NY 10011
Telephone: 212-992-6839
E-mail: sangel@stern.nyu.edu
ablei@stern.nyu.edu
ms388@nyu.edu

Objective:
The aim of this course is to provide students with a broad international perspective on urbanization and to introduce them to the theory, the issues, the evidence, and the practical tools necessary to formulate and put into practice effective policies that can respond to rapid urbanization in countries the world over, policies that can ensure that cities grow in a productive, inclusive, sustainable, and resilient manner in the decades to come. A practical aim of the course is to provide students with a specific skill: Answering policy-relevant questions by analyzing urban datasets in Excel and writing short blogs communicating these answers.

Course Description:
This course is offered as a course in International Politics at the Department of Politics at New York University. The course is a 4-credit course and it will be given in 13 sessions, one session a week, during the Fall Semester of 2019. The sessions will be composed of lecture
presentations by the instructor, followed by a class discussion and then by a discussion of the dataset associated with the lecture topic. Each session will then be followed by a voluntary lab session, led by an Associate Instructor and a Teaching Assistant, and devoted to the analysis of the dataset associated with the topic of the session.

Class sessions will be divided into three class periods: (1) Lecture: 6:20pm-7:05pm, (2) Class discussion: 7:15pm-8:00pm, and (3) Dataset Introduction: 8:00pm-8:20pm. The class will then be followed by a 40 minute voluntary lab session (8:20-9:00pm). There are no prerequisites for the course, but a basic familiarity with Microsoft Excel is required for the successful completion of the course. The required readings for the course will be chapters from the instructor’s book, Planet of Cities [Cambridge MA: Lincoln Institute of Land Policy, 2012], supplemented by additional readings of short articles and working papers.

The structure of the course, the emphasis on evidence, and the analyses of datasets as assignments are novel and the course is given in this format for the first time.

The Instructor:

Shlomo (Solly) Angel is a Professor of City Planning and Director of the NYU Urban Expansion Program at the Marron Institute of Urban Management and the Stern School of Business of New York University. The twin missions of the NYU Urban Expansion Program are to assist rapidly growing cities in less-developed countries in making minimal preparations for their inevitable expansion and to monitor global urban expansion. Prior to joining NYU, Dr. Angel was a fellow at the Lincoln Institute of Land Policy of Cambridge, Massachusetts. This resulted in the publication in 2012 of his most recent book, Planet of Cities and its companion Atlas of Urban Expansion (with colleagues). Dr. Angel holds an architecture degree and a doctorate in City and Regional Planning from the University of California at Berkeley. He is a co-author of A Pattern Language; the author of Housing Policy Matters (Oxford University Press, 2000), the co-author of the World Bank’s housing policy paper titled Housing: Enabling Markets to Work, and the author of more than a dozen monographs on housing policy in different countries in Latin America. As an international expert on housing and urban development policy he has consulted the United Nations, the World Bank, the Inter-American Development Bank, and numerous national governments. He has also taught urban policy and planning at the Asian Institute of Technology in Bangkok for ten years, at Princeton University’s Woodrow Wilson School for seven years and at the NYU Wagner School for twelve years. Dr. Angel’s key contribution to the field of housing policy, urban planning, and urban policy has been his work on the comparative mapping and measurement of cities and their spatial attributes on a global scale, and on the production of maps and metrics that can effectively inform urban planning and policy decisions. His most recent contribution, prepared with colleagues for Habitat III, the U.N. Conference on Cities held in Quito, Ecuador is Atlas of Urban Expansion—2016, on line at
www.atlasofurbanexpansion.org. He is currently working on a study titled *The Anatomy of Density: Seven Measurable Factors that Together Constitute Urban Density and Their Use in Formulating Comprehensive City Densification Strategies.*

**Course Requirements:**

There are three requirements for completing the course: (1) Reading one or two chapters every week in *Planet of Cities* and other assigned readings before coming to class; (2) Analyzing a total of six datasets, completing at least one every two weeks, and writing a draft 1,000-word answers to a policy-relevant question using the chosen dataset; and (3) writing a total of six 1000-word blog posts based on the previous drafts and posting them online by the end of the term. The grade for the course will be a weighted average of the grades for the best five drafts a student submits during the term (10% each) and the best five blog posts a student submits by the end of the term (10% each).

To facilitate the analysis of datasets, the instructor will provide an initial list of questions that can be investigated using the datasets. Associate instructors will familiarize students with the use of Excel, as well as the free statistical program associated with it titled *StatPlus* with a view to testing simple hypotheses using the data and presenting the results in tables, charts, and graphs. The datasets and the other assigned readings will be available for download on the course’s website.

**Readings:**

Shlomo Angel’s *Planet of Cities* [Cambridge MA: Lincoln Institute of Land Policy, 2012] will be the textbook for the class. Books will be available at the NYU Bookstore on Broadway or at Amazon. They are now also available as e-books at Amazon. In addition, there are required readings for every session. Students are expected to read the required chapters and articles in advance of the class to which they are assigned.

**Office Hours:**

The instructor and, on occasion, the associate instructors will meet students, by appointment only, at the Marron Institute for Urban Management. Please e–mail to arrange for an appointment. Appointments will generally be held on Thursday afternoons, 4:00–6:00 p.m.
Course Schedule:

The thirteen sessions in the course will be divided into three parts:

- **Part I:** Five Dimensions of ‘The Urbanization Project’;
- **Part II:** Five Critical Urban Policy Issues; and
- **Part III:** Three Challenges to ‘The Compact City Paradigm’.

**Part I: Five Dimensions of the Urbanization Project**

Session 1 [3 September]: **Urbanization in Historical Perspective**

*Readings:* Shlomo Angel, *Planet of Cities*, Chapter 6 (pp.77-96);
Douglas Rae, excerpt from *City: Urbanism and its End* (pp.1-31);
Marc Antrop, “Landscape change and the urbanization process in Europe”;


Session 2 [10 September]: **The Geography of World Urbanization**

*Readings:* Shlomo Angel, *Planet of Cities*, Chapter 7 (pp.97-110);
Neil Brenner, “Theses on Urbanization”;


Session 3 [17 September]: **The Global Hierarchy of Cities**

*Readings:* Shlomo Angel, *Planet of Cities*, Chapter 8 (pp.111-134);
Alberto F. Ades and Edward E. Glaeser, “Trade and Circuses: Explaining Urban Giants”;
Saskia Sassen, “The Global City: Introducing a Concept”.


Session 4 [24 September]: **From Centrality to Dispersal**

*Readings:* Shlomo Angel, *Planet of Cities*, Chapter 12 (pp.187-204);
Mills and Tan, “A Comparison of Urban Population Density Functions in Developed and Developing Countries”;

Homer Hoyt, “Forces of Urban Centralization and Decentralization”;

Evelyn Blumenberg and Michael Manville, “Beyond the Spatial Mismatch: Welfare Recipients and Transportation Policy”;

Shlomo Angel and Alejandro M. Blei, “The Spatial Structure of American Cities”.

**Datasets:** National Historical Geographic Information System (NHGIS), historical U.S. Census data tables, online: [https://www.nhgis.org](https://www.nhgis.org).

Session 5 [1 October]: **The Fragmentation of Urban Footprints**

**Readings:** Shlomo Angel, *Planet of Cities*, Chapter 13 (pp.205-222);

Janice Lord and David Norton, “Scale and the Spatial Concept of Fragmentation”;

Robert Lang and Paul Knox, “The New Metropolis: Rethinking Megalopolis”.

**Datasets:** Shlomo Angel et al., *Atlas of Urban Expansion—2016 Edition*, Volume 1: Areas and Densities, online at [www.atlasofurbanexpansion.org](http://www.atlasofurbanexpansion.org);

October 8: No class.

October 15: No class.

**Part II: Five Critical Urban Policy Issues**

Session 6 [22 October]: **The Productivity of Urban Job Markets**

**Readings:** Alain Bertaud, “Cities as Labor Markets”;

Melo et al. “Agglomeration, accessibility and productivity: Evidence for large metropolitan areas in the US;”

Enrico Moretti, excerpt from *The New Geography of Jobs* (pp.1-19);

Shlomo Angel and Alejandro M. Blei, “The Productivity of American Cities”.

**Datasets:** U.S., Bureau of Economic Analysis, data, online at: [https://www.bea.gov/data](https://www.bea.gov/data)

Session 7 [29 October]: **The Housing Problem**

**Readings:** Shlomo Angel, *Housing Policy Matters*, Introduction and Chapters 1-3 (pages 3-36);

John F.C. Turner, “Barriers and Channels for housing Development in Modernizing Countries”;

**Datasets:** City of New York, Primary Land Use Taxlot Output (PLUTO), online at: [https://data.cityofnewyork.us/widgets/xuk2-nczf](https://data.cityofnewyork.us/widgets/xuk2-nczf); National Historical Geographic Information System (NHGIS), historical U.S. Census data tables, online: [https://www.nhgis.org](https://www.nhgis.org).

Session 8 [5 November]: **The Public Works Crisis**

**Readings:** Shlomo Angel, *Planet of Cities*, “The Public Works Proposition”, Chapter 5 (pp. 56-73);

[More to come]

**Datasets:** Shlomo Angel et al., *Atlas of Urban Expansion—2016 Edition*, Volume 2: Blocks and Roads, online at [www.atlasofurbanexpansion.org](http://www.atlasofurbanexpansion.org);

Session 9 [12 November]: **Shaping the City to Address Climate Change**

**Readings:** Intergovernmental Panel on Climate Change (IPCC), *Fifth Assessment Report*, “Chapter 12: Human Settlements, Infrastructure and Spatial Planning”;


World Bank, “Guide to Climate Change Adaptation in Cities”.

**Datasets:** Carbon Disclosure Project (CDP), Cities dataset, online at: [https://www.cdp.net/en/cities](https://www.cdp.net/en/cities)

Session 10 [19 November]: **Urban Expansion and the Loss of Cultivated Lands**

**Readings:** Shlomo Angel, *Planet of Cities*, Chapter 16 (pp.265-284);

Cadenasso et al., “Spatial heterogeneity in urban ecosystems: reconceptualizing land cover and a framework for classification”;


**Part III: Three Challenges to The Compact City Paradigm**

Session 11[26 November]: **Densification vs. Expansion**

**Readings:** Shlomo Angel, *Planet of Cities*, Chapter 11 (pp. 170-185);
Ahlfeldt, G. and E. Pietrostefani, 2018. “Demystifying compact urban growth: Evidence from 300 studies from across the world”;
Shlomo Angel and Patrick Lamson-Hall, “Densification vs. Expansion.”


Session 12 [3 December]: The Anatomy of Density

Michael Sorkin, “Density Noodle;”
Nicola Dempsey et al. “The key to sustainable urban development in UK cities? The influence of density on social sustainability”.

Datasets: Shlomo Angel and Patrick Lamson-Hall: Data archives for calculating the anatomy of density in ten pilot cities.

Session 13 [10 December]: Making Room for Urban Expansion


* * *