**PLAN 714 Urban Spatial Structure**, **FALL 2021**

Instructor:

Yan Song

Lectures: Tuesdays and Thursdays 8:00am–9:15am (PHILLIPS 265)

Office Hours: Wednesdays: 2:00pm-3:00pm or by appointment

Office: NE 319 or Zoom Meetings (<https://unc.zoom.us/j/760399746>)

Email: [ys@email.unc.edu](mailto:ys@email.unc.edu)

Teaching Assistants:

Xijing Li (he/his/him)

Lab Sessions: Fridays 1pm-2pm and 2pm-3pm (NE 102)

Office hour: Wednesday 2:00pm-3:00 pm or by appointment (please email to confirm)

Location: NE 404 or Zoom Meetings (<https://unc.zoom.us/j/9238394823>)

Email: [xijingl2@unc.edu](mailto:xijingl2@unc.edu)

Chris Samoray (he/his/him)

Recitation Sessions: Fridays 9:00am-10:00am (FedEx Global 1005)

Office Hours: Mondays, 10:45-11:45 or by appointment (please email to confirm)

Location: NE 404 or Zoom Meetings (<https://unc.zoom.us/my/chris.samoray>)

Email: [csamoray@unc.edu](mailto:csamoray@unc.edu)

**COURSE DESCRIPTION**

This course will provide planning students a foundational understanding of how cities work. By its nature this course will cut across all major fields within planning and will introduce the major theories, models, and methodological approaches that planners use to explain the function and structure of urban areas. This course concentrates on positive behavioral theories that explain the actions of residents and forms that determine the spatial dynamics of cities, it also draws on structural and institutional theories of urban change. This course also covers the history of planning interventions to shape the built environment from the late 19th century to today.

PLAN 714 is organized in four parts. The first covers the history of urbanization—from early origins to the contemporary economic and demographic trends—and presents an overview of urban spatial structure over time. The second part covers the shaping of cities. It discusses the essential tools that explain the basic theories of land use, the location of population and employment across space, and the policies and institutions influencing the urban spatial structure of cities. The third section discusses the measurements of urban spatial structure or urban form. The final section seeks to put the theory and history presented thus far to the test in understanding and responding to critical issues that cuts across nearly all aspects of planning of cities today: urban sprawl, transportation, air quality, climate change, public health, and social and spatial inequality at the urban and regional scales.

The topics covered in this course are essential for understanding the forces that have shaped the development of modern metropolitan areas. They also constitute a basis for defining and understanding the role of planners. The focus of the course is primarily the United States, although we will also focus attention on the challenges of urbanization in the developing world.

**OBJECTIVES**

By the end of this course, students should be able to:

* Understand the major historical epochs in planning and the ways they attempted to shape the
  1. design and function of cities.
* Identify and assess the importance of major social, political, and economic forces that have

shaped urban spatial development of cities in the U.S. and elsewhere.

* Formulate and evaluate current policy and planning challenges affecting U.S. urban areas.
* Understand descriptive and prescriptive approaches for examining urban form and function.
* Have a broad understanding of planning issues outside a student’s specialization area.
* Formulate questions for in-depth exploration in subsequent courses and research.

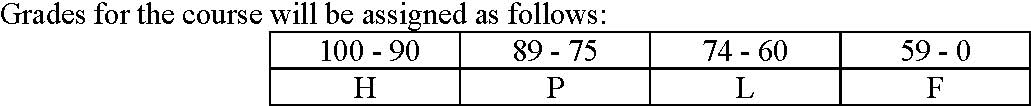
**COURSE FORMAT**

The course is organized around two weekly lectures, class discussions, and skill building recitations and labs. Although the course is large, participation and discussion is expected and required. Students should complete the readings for a given session before coming to class on that day.

Students are expected to attend and participate during class meetings. Beyond the weekly reading, the coursework consists of three group assignments and a final exam. The group assignments are a critical part of the course (comprising 75% of your overall grade) and will require you to draw upon and analyze a wide variety of planning datasets. You will be assigned to one group for the entire semester and all team members are expected to pull their own weight and contribute to the group in a positive manner. As such 5% of your grade will be based on the feedback given to the instructor by your peers. A close-book final exam will be given during the final exam week, and is ***tentatively*** scheduled for 1pm and 3pm on Friday December 10th.

**Coursework Overview And Grading Allocation**

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| --- | --- | --- |
| Group assignment 1 | Tracking your region | 25% |
| Group assignment 2 | Tracking your region | 25% |
| Group assignment 3 | Tracking your region | 25% |
| Peer assessment |  | 5% |
| Final Exam | 12/10 (tentatively) | 20% |



*In fairness to all students, no late assignments will be accepted without a written medical excuse from your doctor and a proposed new deadline. Also, once set, I cannot alter the presentation date. It is not flexible, so please make your travel plans and other commitments accordingly.*

**RECITATIONS and LAB**

Recitations related to reading discussions will be scheduled on a regular basis. Recitation periods will consist of critical thinking and discussions of theories and evidences of urban spatial structure.

Lab times will be used to learn and develop new software skills to construct spatial models in support of data analysis, and to work through practical problems associated with your group assignments under the guidance of the TA.

**READING MATERIAL**

All required readings are available on the course website on Sakai. *Please note that occasionally I will add most recent and relevant articles once they are published.*

**HONOR CODE**

The UNC honor Code states: “It shall be the responsibility of every student at The University of North Carolina at Chapel Hill to obey and to support the enforcement of the honor code, which prohibits lying, cheating, or stealing when these actions involve academic processes or University, student or academic personnel acting in an official capacity.”

To meet this standard in this course, note the following: in written work, all ideas (as well as data or other information) that are not your own must be cited. Note that ideas that require citation may not have been published or written down anywhere. Discussion of assignments with peers is strongly encouraged.

Please also note that we will all follow the new standards on The Well: [Understanding Carolina’s new community standards](https://thewell.unc.edu/2021/08/10/understanding-carolinas-new-community-standards/) (https://thewell.unc.edu/2021/08/10/understanding-carolinas-new-community-standards/)

**CLASS SCHEDULE- FALL 2021**

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| --- | --- | --- |
| **DATE** | **DAY** | **TOPIC** |
| 19-Aug | TH | 1. Introduction, Course Overview |
| 24-Aug | T | 1. Origin of Cities |
| 26-Aug | TH | 1. History of Settlement Form in the U.S. |
| 31-Aug | T | 1. Planning History I: The birth of planning: From the City Beautiful to the Garden City |
| 2-Sep | TH | 1. Planning History II: The Rise and Fall of Modernist Planning |
| 7-Sep | T | 1. Planning History III: New Urbanism, Re-urbanism, and Hyper Urbanism |
| 9-Sep | TH | 1. Presentations group assignment # 1 (Groups 1-5) |
| 14-Sep | T | 1. Presentations group assignment # 1 (Groups 6-10) |
| 16-Sep | TH | 1. Classical Land Use Models; Introduction to Land Rent |
| 21-Sep | T | 1. Public Goods and Urban Location |
| 23-Sep | TH | 1. Urban Policy and Urban Spatial Structure I: Housing |
| 28-Sep | T | 1. Urban Policy and Urban Spatial Structure II: Transportation Infrastructure |
| 30-Sep | TH | 1. Urbanization: Global Challenges |
| 5-Oct | T | 1. Urban Form/Urban Spatial Structure: Measurements |
| 7-Oct | TH | 1. The Monocentric City and Planning Implications |
| 12-Oct | T | 1. The Polycentric and the Dispersed City |
| 14-Oct | TH | 1. Presentations group assignment # 2 (Groups 6-10) |
| 19-Oct | T | 1. Presentations group assignment # 2 (Groups 1-5) |
| 21-Oct | TH | NO CLASS FALL BREAK |
| 26-Oct | T | 1. Sprawl |
| 28-Oct | TH | 1. Urban Development, Transportation and Air Quality |
| 2-Nov | T | 1. Urban Development and Climate Change |
| 4-Nov | TH | 1. Urban Development and Public Health |
| 9-Nov | T | 1. Uneven Urban Development: Causes and Consequences |
| 11-Nov | TH | 24. The Concentration of Poverty, Race, Politics, and Urban Space |
| 16-Nov | T | 25. Strategies for Equitable Development |
| 18-Nov | TH | 26. Presentations group assignment # 3 (Groups 1-5) |
| 23-Nov | T | 27. Presentations group assignment # 3 (Groups 6-10) |
| 25-Nov | TH | NO CLASS (Thanksgiving Break) |
| 30-Nov | T | Class Wrap Up and Final Exam Review |
| 10-Dec | FRI | Final Exam (3 hours) |
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**RECITATION / LAB SCHEDULE- FALL 2021**

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| **DATE** | **DAY** | **Recitation (9:00am – 10:00am)** | **Lab (1:00pm – 2:00pm; 2:00pm - 3:00pm)** |
| 20-Aug | F | No meeting | No meeting |
| 27-Aug | F | No meeting | No meeting |
| 3-Sep | F | No meeting | GIS Sessions for Group Assignment 1 (Groups 1-5) (Groups 6-10) |
| 10-Sep | F | Reading Recitations | No meeting |
| 17-Sep | F | No meeting | No meeting |
| 24-Sep | F | No meeting | No meeting |
| 1-Oct | F | No meeting | GIS Sessions for Group Assignment 2 (Groups 1-5) (Groups 6-10) |
| 8-Oct | F | Reading Recitations | No meeting |
| 15-Oct | F | No meeting | No meeting |
| 22-Oct | F | No meeting | No meeting |
| 29-Oct | F | Reading Recitations | No meeting |
| 5-Nov | F | No meeting | GIS Sessions for Group Assignment 2 (Groups 1-5) (Groups 6-10) |
| 12-Nov | F | No meeting | No meeting |
| 19-Nov | F | Reading Recitations | No meeting |
| 26-Nov | F | THANKSGIVING | THANKSGIVING |

*Note: Recitation and/or lab content and schedule subject to change. Look for weekly reminders from TAs about locations/times and content.* **PLAN 714 FALL 2021  
SESSION TOPICS AND READINGS**

1. **Introduction, Course Overview (8/19)**

**PART I: History of Cities**

1. **Origin of Cities (8/24 & 8/26)**

Jacobs, J. (1969). *The Economy of Cities*, New York: Random House. Chapter 1 “Cities First—Rural Development Later” pp. 1-48.

1. **History of Settlement Form in the U.S. (8/24 & 8/26)**

Herbert and Thomas, *Cities in Space, City as Place*, Chapter 2, Urban origins and change

over time, 17-43.

Phillips, B.E., 1996 *City Lights: Urban-Suburban Life in the Global Society*, Chapter 4 “From Urban Specks to Global Cities” pp. 81-109. (New York: Oxford University Press, 2nd Edition)

1. **Planning History I: The Birth of Planning: From the City Beautiful to the Garden City (8/31)**

Hall, Peter (1996) Chapter 2 “The City of Dreadful Night” in Cities of Tomorrow

Hall, Peter (1996) Chapter 4 “The City in the Garden” in Cities of Tomorrow

**5. Planning History II: The Rise and Fall of Modernist Planning (9/2)**

Hall, Peter Chapter 7. “The City of Towers: The Corbusian Radiant City: Paris,

Chandigarh, Brasilia, London, St. Louis” in Cities of Tomorrow. pp. 204-240.

Hirsch, Arnold 1985 Making the Second Ghetto (selected chapters)

1. **Planning History III: New Urbanism, Re-urbanism, and Hyper Urbanism (9/7)**

Chakrabarti, Vishaan, and Norman Foster (2013). A Country of Cities: A Manifesto For An Urban. New York: Metropolis Books, Section 1: “Why Cities are Good” A Country of Cities. pp. 52-125.

Duany, Andres, Plater-Zyberk, Elizabeth and Jeff Speck (2001) “Suburban Nation: The Rise of Sprawl and the Decline of the American Dream. “Chapters 1 & 11.

Song, Y. and G. Knaap (2003) “New urbanism and housing values: a disaggregate assessment.” Journal of Urban Economics,Volume 54, Issue 2.

**7. In-Class Presentations (9/9)**

**8. In-Class Presentations (9/14)**

**PART II: Shaping of Cities: Economics, Policies and Institutions**

1. **Classical Land Use Models; Introduction to Land Rent (9/16)**

Herbert, D. T., and C. J. Thomas. 1997. *Cities in Space: City as Place*. Savage, MD: Barnes and Noble. Chapter 9, The residential mosaic, pp. 195-237.

1. **Locational Behavior (9/21)**

Taylor Brydges & Brian J. Hracs (2019) The locational choices and interregional mobilities of creative entrepreneurs within Canada’s fashion system, Regional Studies, 53:4, 517-527.

1. **Urban Policy and Urban Spatial Structure I: Housing (9/23)**

Jackson*,* Kenneth T. “Federal Subsidy and the Suburban Dream” Chapter 11 in *Crabgrass Frontier: The Suburbanization of the United States*, (New York: Oxford University Press, 1985) pp. 190-218.   
  
Moore, Natalie K. (2016) “The South Side” Chapters. 1-3.

Birch, E. L. (1999). The Housing and Slum Clearance Act and its Effects on the Urban

Planning Profession.

1. **Urban Policy and Urban Spatial Structure II: Transportation Infrastructure (9/28)**

Muller, P. O. 2004. Transportation and urban form: Stages in the spatial evolution of the American metropolis. In *The Geography of Urban Transportation*, edited by S. Hanson and

G. Giuliano, pp. 59-85. New York: Guilford.

Brown, J. R.; Morris, E. A.; and Taylor, B. D. 2009. Planning for Cars in Cities: Planners, Engineers, and Freeways in the 20th Century. *Journal of the American Planning Association*, 75(2): 161-177

1. **Urbanization: Global Challenges (9/30)**

Panwar, NS, Mishra, AK. COVID-19 crisis and urbanization, migration and inclusive city policies in India: A new theoretical framework. J Public Affairs. 2020.

Watson, V. (2013). African urban fantasies: dreams or nightmares? Environment and   
 Urbanization, 0956247813513705.

United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision, Highlights (ST/ESA/SER.A/352).

**PART III: SPATIAL STRUCTURE AND OUTCOMES**

1. **Urban Form / Urban Spatial Structure: Measurements (10/5)**

Yan Song & Gerrit-Jan Knaap (2004) Measuring Urban Form: Is Portland Winning the War on Sprawl?, Journal of the American Planning Association, 70:2, 210-225.

Kelly Clifton, Reid Ewing, Gerrit‐Jan Knaap & Yan Song (2008) Quantitative analysis of urban form: a multidisciplinary review, Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 1:1, 17-4

Yan Chen, Yan Song, Chaosu Li, Where do people tweet? The relationship of the built environment to tweeting in Chicago, Sustainable Cities and Society, Volume 52, 2020.

**15. The Monocentric City and Planning Implications (10/7)**

O’Flaherty, B, 2004. *City Economics*, Chapter 6, Land 116-144, Harvard University Press.

McCann, Philip. 2001. *Urban and Regional Economics.* Oxford: Oxford University, Ch 3 & 7

**16. The Polycentric and the Dispersed City: Review and Challenges (10/12)**

Anas, A., R. Arnott and K. A. Small. 1998. Urban spatial structure. *Journal of Economic*

*Literature* 36(3): 1426-64.

Ingram, G. K. 1998. Patterns of metropolitan development: What have we learned? *Urban*

Studies 35(7): 1019-1035.

Jixuan Cai, Bo Huang, Yimeng Song, Using multi-source geospatial big data to identify the structure of polycentric cities, Remote Sensing of Environment, Volume 202, 2017.

**17. In-Class Presentations (10/14)**

**18. In-Class Presentations (10/19)**

**Thursday October 21th- No Class: Fall Break**

**PART IV: Urban Spatial Structure: Trend and CHALLENGES:**

1. **Sprawl (10/26)**

Galster, G., R. Hanson, M.R. Ratcliffe, H. Wolman, S. Coleman, and J. Freihage. 2001. Wrestling sprawl to the ground: defining and measuring an elusive concept. *Housing Policy Debate*, 12(4): 681-718

Mieszkowski, P and E. Mills. 1993. The causes of metropolitan suburbanization.

*Journal of Economic Perspectives*, 7(3): 135-147

Gordon, Peter and Harry Richardson. 2000. Critiquing sprawl’s critics. *Policy*

*Analysis*. The Cato Institute, no. 365.

Beauregard, R. A. 2001. Federal policy and postwar urban decline: A case of government

complicity? *Housing Policy Debate*, 12(1): 129-151.

**20. Urban Development, Transportation, and Air Quality (10/28)**

Xijing Li. Story from Shanghai.

Yuan M, Song Y, Huang Y, Hong S, Huang L. Exploring the Association between Urban Form and Air Quality in China. Journal of Planning Education and Research. 2018;38(4):413-426.

**21. Urban Development and Climate Change (11/2)**

Jiajun Lu, “Household residential location choice in retirement: The role of climate amenities,” Regional Science and Urban Economics, Volume 84, 2020.

**22. Urban Development and Public Health (11/4)**

Maroko, A.R., Nash, D. & Pavilonis, B.T. COVID-19 and Inequity: a Comparative Spatial Analysis of New York City and Chicago Hot Spots. J Urban Health 97, 461–470 (2020).

**23. Uneven Urban Development: Causes and Consequences (11/9)**

Logan, J. R., & Molotch, H. L. (1987). Urban fortunes: the political economy of place. Berkeley, CA: University of California Press. (selected Chapters)

Swanstrom & Drier (2005) Place Matters (chapter 1)

**24. The Concentration of Poverty, Race, Politics, and Urban Space (11/11)**

Teitz, M. B., and K. Chapple. 1998. The causes of inner-city poverty: Eight

hypotheses in search of reality. *Cityscape* 3(3): 33-70.

Dunier, Mitchel (2016) “Chapter 2-Chicago 1944: Horace Cayton” in The Ghetto: The Invention of a Place and the History of an Idea. Farrar, Strauss, and Giraux: New York.

Wacquant, L. (2008). Urban outcasts: A comparative sociology of advanced marginality.   
 Polity. (prologue and Chapter 2).

Johnson, Walter (2015) “Ferguson’s Fortune 500 Company” *Atlantic Monthly*. April 26th,   
 <http://www.theatlantic.com/politics/archive/2015/04/fergusons-fortune-500-company/390492/>

**25. Strategies for Equitable Development (11/16)**

Florida, Richard (2017) The New Urban Crisis Basic Books: New York, Ch. 10.

Pastor, M., Drier, P., et. al. (2000). Regions that Work: How Cities and Suburbs Can Grow Together. Minneapolis: University of Minnesota. Selected chapters.

Nicholas J. Marantz (2015) “What Do Community Benefits Agreements

Deliver? Evidence From Los Angeles,” *Journal of the American Planning Association*, 81:4, 251-267, DOI: 10.1080/01944363.2015.1092093

**26. In-Class Presentations (10/14)**

**27. In-Class Presentations (10/19)**

**No Class: Thanksgiving Break (11/25)**

**28. Class Wrap Up and Final Exam Review (Nov 30)**