

# **GMS 200 GLOBAL METROPOLITAN STUDIES: INTRODUCTION TO THEORIES, HISTORIES, & METHODS**

Spring 2018 • Mondays 2-5 PM • 749 Barrows Hall • 3 Units • For PhD Students

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The 21st century will be an urban century with more people around the world residing in metropolitan regions than in any other form of human settlement. This urbanization is taking place in both the global North and the global South. Its implications are widespread: from environmental challenges, to entrenched patterns of segregation, to new configurations of politics and social movements. The Global Metropolitan Studies Initiative at UC Berkeley is concerned with this urban condition, bringing together faculty and students across campus to foster interdisciplinary thinking and solutions to contemporary urban concerns. This course will introduce methodological approaches from urban theory to governance to engineering. The objectives of the course are to:

- Provide an opportunity to understand how research is undertaken in the various disciplines to contribute to our understanding of urban and metropolitan processes,
- Develop the technical breadth and communication skills essential to navigate our ever-increasing interdisciplinary world,
- Further connect and build the community on campus interested in addressing issues of global cities, and
- Advance doctoral students' research by examining objectives and research design through an interdisciplinary lens.

This is a 3 unit graduate course that is required for students in the GMS Designated Emphasis and open to other doctoral students focused on metropolitan issues either domestically or abroad.

## COURSE EXPECTATIONS AND GRADING

### **Reading and Attendance** — 20% of final grade

It is expected that students attend class regularly, read carefully the readings before each class meeting, and actively participate in the class discussions of the assigned readings. All readings are posted on bCourses unless otherwise noted.

### **Weekly Commentary** — 20% of final grade

Students are expected to write a weekly commentary (not to exceed 500 words). Commentaries are to be submitted to the discussion section on the course website by 5 PM on Sundays before class, and you are expected to have read your classmates commentaries before each class. Commentaries are meant to be practice for developing a useful academic skill—writing a paper or book review—and will be modeled after this style of document. The write-up should focus on the key claims, methods, and methodologies of the weekly readings. Identify a common thread, comparison, or argument that conceptually ties these readings together. Pair a summary of the readings with critique of the works or a discussion of the important questions raised by the body of work.

### **Class Discussion** — 20% of final grade

Students are expected to initiate the class discussions a few times during the semester (dates will be assigned in class). To initiate a discussion means to raise a series of questions about the week's readings to guide conversations in class. Students may choose to bring questions in writing with copies for everyone. Additionally, students may bring visual materials that complement/illustrate the cases being analyzed.

### **Research Proposal** — 40% of final grade

Finally, each student will complete a term project, a research proposal that is informed by the multidisciplinary knowledge gained in the class (15 pages) due on **April 30<sup>th</sup>** (by email).

## SCHEDULE

### **WEEK 1: INTRODUCTION**

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#### **January 22: Opening Case Study: Interdisciplinary Research on Intermittent Water Supply in India**

Ayşe Ercumen, Benjamin F. Arnold, Emily Kumpel, Zachary Burt, Isha Ray, Kara Nelson, & John M. Colford, Jr. 2015. "Upgrading a piped water supply from intermittent to continuous delivery and association with waterborne illness: A matched cohort study in urban India." *PLoS Medicine*, 12(10).

Emily Kumpel, Cleo Woelfle-Erskine, Isha Ray, and Kara L. Nelson. 2016. "Measuring household consumption and waste in unmetered, intermittent piped water systems." *Water Resources Research*, 53(1).

Post, Alison E., Tanu Kumar, Megan Otsuka, Francesc Pardo-Bosch, and Isha Ray. "Distributive politics in networked systems: The political geography of water intermittency." (Working paper). UC Berkeley.

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## **WEEKS 2-4 URBAN THEORY, PLANNING, AND ENVIRONMENTAL DESIGN**

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### **January 29: Urbanization Processes and Their Effects**

Wirth, Louis. 1938[2016]. "Urbanism as a way of life." In: Richard T. LeGates and Frederic Stout, eds. *The City Reader*, 6th ed. Routledge, Milton Park, Abingdon, Oxon: 115-123.

Ong, Aihwa. 1988. "The Production of Possession: Spirits and the Multinational Corporation in Malaysia." *American Ethnologist* 15(1): 28-42.

Simone, AbdouMaliq. 2011. "Deals with imaginaries and perspectives: reworking urban economies in Kinshasa." *Social Dynamics* 37(1): 111-124.

Brenner, Neil, and Christian Schmid. 2014. "The 'Urban Age' in Question." *International Journal of Urban and Regional Research* 38 (3): 731-55.

### **February 5: Conceptualizing International Urban Systems**

Sassen, Saskia. 2002. "Locating Cities on Global Circuits." *Environment and Urbanization* 14(1): 13-30.

Goldman, Michael. 2011. "Speculative Urbanism and the Making of the Next World City." *International Journal of Urban and Regional Research* 35(3): 555-81

Robinson, Jennifer. 2002. "Global and world cities: A view from off the map." *International Journal of Urban and Regional Research* 26(3): 531-54.

Caldeira, Teresa PR. 2017. "Peripheral Urbanization: Autoconstruction, transversal logics, and politics in cities of the Global South." *Environment and Planning D: Society and Space* 35(1): 3-20.

### **February 12: Urban Planning and Its Impacts (Case study: Transportation Planning)**

Chatman, Daniel and Robert B. Noland. 2013. "Transit service, physical agglomeration and productivity in US metropolitan areas." *Urban Studies* 1(21): 1-21.

Grengs, Joe. 2012. "Equity and the social distribution of job accessibility in Detroit." *Environment and Planning B: Urban Analytics and City Science*. 39(5): 785-800.

Frick, Karen Trapenberg. 2013. "The actions of discontent: Tea Party and property rights activists pushing back against regional planning." *Journal of the American Planning Association*. 79(3): 190-200.

## **WEEKS 5-7: URBAN STUDIES AND THE SOCIAL SCIENCES**

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**February 19: NO CLASS/ HOLIDAY**

**February 26: Economic Geography and Urban Economics**

Ellison, Glenn, Edward L. Glaeser and William R. Kerr. 2010. "What Causes Industry Agglomeration? Evidence from Coagglomeration Patterns." *The American Economic Review*. 100(3): 1195-1213.

Storper, Michael. "Winner and Loser Regions." From *The Keys to the City*. 2013. Oxford University Press. Pp. 92-103. (see also: ["Why San Francisco's way of doing business beat Los Angeles"](#)).

Harris, John. 2014. "The messy reality of agglomeration economies in urban informality: evidence from Nairobi's handicraft industry." *World Development* 61: 102-113.

**March 5: The Politics of Urban Policy**

Tausanovitch, Chris and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review*. 108(3): 605-641.

Habyarimana, James, Macartan Humphreys, Daniel Posner, and Jeremy Weinstein. 2007. "Why does ethnic diversity undermine public goods provision?" *American Political Science Review*. 101(4): 709-725.

Post, Alison E. 2014. "Home Court Advantage: Investor Type and Contractual Resilience in the Argentine Water Sector." *Politics & Society*. 42(1): 107-132.

**March 12: Urban Sociology—Urban Neighborhoods and the Persistence of Poverty**

Sampson, Robert J. 2012. *Great American City: Chicago and the Enduring Neighborhood Effect*. Chapters 1, 2 and 13: pp. 2-49, 309-328.

Desmond, Matthew. 2012. "Eviction and the Reproduction of Urban Poverty." *American Journal of Sociology*. 118(1): 88-133.

## **WEEKS 8-10: ENGINEERING FOR GLOBAL CITIES**

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**March 19: Urban Infrastructure Systems**

Energy

Kammen, M. Daniel and Sunter A. Deborah. 2016. "City-integrated renewable energy for urban sustainability" *Science* 352(6288): 922-928.

Water

Manohar, Usha, and M.S. Mohan Kumar. 2014. "Modeling equitable distribution of water: dynamic inversion-based controller approach." *Journal of Water Resources Planning and Management* 145(5): 607-619.

Energy & Water

Rao, Prakash, Robert KostECKI, Larry Dale, and Ashok Gadgil. 2017. "Technology and engineering of the water-energy nexus." *Annual Review of Environment and Resources* 42(42): 407-37.

Technology

Batty, Michael, Kay W. Axhausen, Fosca Giannotti, Alexei Pozdnoukhov, Armando Bazzani, Monica Wachowicz, Georgios Ouzounis, and Yuval Portugali. 2012. "Smart cities of the future." *The European Physical Journal Special Topics* 214(1): 481-518.

**(March 26–March 30: Spring Recess)**

**April 2: Methods 1**

Measure

Ruiz-Mercado, Ilsa, Omar Masera, Hilda Zamora, and Kirk R. Smith. 2011. "Adoption and sustained use of improved cookstoves." *Energy Policy* 39(12): 7557-7566.

Martani, Claudio, Simon Stent, Sinan Acikgoz, Kenichi Soga, Dean Bain, and Ying Jin. 2017. "Pedestrian monitoring techniques for crowd-flow prediction." *Smart Infrastructure and Construction* 170(2), 17-27.

Build

van Genuchten, Case M., Susan E.A. Addy, Jasquelin Pena, Ashok J. Gadgil. 2012. "Removing arsenic from synthetic groundwater with iron electrocoagulation: an Fe and As K-edge EXAFS study." *Environmental Science & Technology* 46(2): 986-994.

Cardone, Giuseppe, Andrea Cirri, Antonio Corradi, and Luca Foschini. 2014. "The ParticipAct mobile crowd sensing living lab: The testbed for smart cities." *IEEE Communications Magazine* 52(10): 78-85.

**April 9: Methods 2**

Model

Vij, Akshay, Sreeta Gorripaty, and Joan L. Walker. 2017. "From trend spotting to trend 'splaining: understanding modal preference shifts in San Francisco Bay Area." *Transportation Research Part A* 95: 238–258.

Simulate

Waddell, Paul. 2002. "UrbanSim: modeling urban development for land use, transportation, and environmental planning." *Journal of the American Planning Association* 68(3): 297-314.

Optimize

Halu, Arda, Antonio Scala, Abdulaziz Khiyami, and Marta C. Gonzalez. 2016. "Data-driven modeling of solar-powered urban microgrids." *Science Advances* 2(1): 1-9.

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**WEEKS 11-12: CURRENT AREAS OF INTERDISCIPLINARY COLLABORATION OR EXCHANGE**

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**April 16: Informal Transit in Kenya**

Williams, Sarah, Adam White, Peter Waiganjo, Daniel Orwa, and Jacqueline Klopp. 2015. "The Digital Matatu Project: Using cell phones to create an open source data for Nairobi's formal bus system." *Journal of Transportation Geography* 49: 39-51.

Chavis, Celeste and Carlos F. Daganzo. 2013. "Analyzing the structure of informal transit: The evening commute problem." *Research in Transportation Economics*. 39(1): 277-284.

Kelly, Erin, Greg Lane, David Schonholzer, and Peter Wagacha Waiganjo. 2017. "Monitoring, contracts, and employee behavior: Evidence from a randomized controlled trial." (Working paper). UC Berkeley.

Post, Alison E., Vivian Bronsoler, and Lana Salman. 2017. "Hybrid Regimes for Local Public Goods Provision." *Perspectives on Politics*. 51(4): 952-966. [read introduction and Nairobi Matatu case study only].

**April 23: Development Engineering**

Nilsson, Lina, Temina Madon, and S. Shankar Sastry. 2014. "Toward a new field of Development Engineering: Linking technology design with the demands of the poor." *Procedia Engineering*. 78: 3-9.

Dzombak, Rachel and Julia Kramer. 2017. "Developing engineering: A critical overview." <https://impactdesignhub.org/2017/01/19/development-engineering-critical-overview/>

Preble, Chelsea V., Odelle L. Hadley, Ashok J. Gadgil, and Thomas W. Kirchstetter. 2014. "Emissions and climate-relevant optical properties of pollutants emitted from a three-stone fire and the Berkeley-Darfur stove tested under laboratory conditions." *Environmental Science and Technology* 48(11): 6484-6491.