

Syllabus

COURSE OBJECTIVES

The purpose of this course is to provide an introduction to the roles of planners in preparing for and rebuilding after disasters. Planners are concerned with the long-term aspects of disaster: the processes of pre-disaster hazard mitigation and post-disaster recovery. The course will only minimally touch on disaster response and emergency preparedness.

The focus is mostly on American planning practice, at the local government level, within the context of national policies. For understanding recovery after large disasters, however, we will rely heavily on international cases, because they provide useful lessons. We also will spend one session on international disaster risk reduction policies.

The emphasis is on planning, and this 400-level course is aimed primarily at the graduate level, so the course is especially appropriate for graduate students in urban planning. It is also suitable for undergraduate planning students, provided that students participate in the course at a professional level (which you will soon be). It is also suitable for students from other disciplines (civil engineering, landscape architecture, architecture, economics, etc.), who appreciate the opportunity to see how planners look at the world: multidisciplinary, action-oriented, strategic.

In terms of practical skills, you should learn:

- The basic emergency management laws and framework in the U.S., and how urban planning fits into them;
- The basic characteristics and principles of hazard mitigation planning and recovery planning;
- The details of the U.S. system of hazard mitigation and recovery;
- The function and contents of a local hazard mitigation plan
- The challenges of post-disaster recovery in a variety of U.S. and international settings;
- Current frontiers regarding planning for “resilience;” and
- Some of the current weaknesses in all of the above.

The course will include basic readings on all the above topics, coupled with case examples, a hazard mitigation group project, and a group project on international recovery.

All course materials are provided through Illinois Compass. This will include all readings, a guide for each week’s material, reading questions for most class sessions, and a blog where you will post your responses to the reading questions.

COURSE COMPONENTS

- Readings (approx 700 pages), attendance, blog postings in response to reading questions, and participation in class discussions. (25% of course grade, 100 points).
- Two integrative essays (25%, 100 points)
- Group presentation and report on a mitigation methods topic (25%, 100 points)
- Group presentation and report on a recovery case (25%, 100 points)

SCHEDULE

The schedule is organized as follows:

- Overview of disasters as phenomena, basic disaster concepts, social context of disasters; concept of community resilience; evolution of U.S. emergency management system (3 weeks)
- Hazard Mitigation (4 weeks)
- Post-disaster Recovery (6 weeks)

Week	Readings	Monday	Wednesday
8/28	Tierney, Lindell, & Perry, Chapter 1 Tierney (2014), Chapters 3, 6, 7	Introduction, Defining disaster, phases of emergency management	Vulnerability and social roots of disaster Community Risk and Resilience
9/4	Rubin, Chapters 3,4,5 FEMA 2014	Labor Day	History: Early US disasters, expansion of federal role, FEMA, DHS
9/11	Torsell and Nagel 2015 Boyd 2011 (reference: Lindsay 2012)	Structure of US system today; Federal funding system for recovery and mitigation <i>Introduce Mitigation Assignment</i>	---no class---
9/18	44CFR201 FEMA 2013: Intro, Task 5, Task 6 FEMA 2011 (NFIP) Illinois DNR 2001 King 2013	Mitigation, State and Federal Responsibilities, Mitigation planning	National Flood Insurance Program
9/25	National Earthquake Hazards Reduction Program: About Us 2016 Rubin 2006 Earthquake policy news items from Los Angeles, Oregon, and Seattle. (reference: Wiley 2000)	Policies for earthquake safety	---no class---
10/2	Olshansky & Kartez 1998 FEMA 2013: Task 9 (reference: Godschalk 2010)	Making mitigation happen	Mitigation presentations (2)
10/9		Mitigation presentations (2)	Mitigation presentations (2) <i>Mitigation Team Reports Due Hand out Essay 1</i>
10/16	Passerini 2000 Jha et al 2010, Intro Johnson&Olshansky 2016 FEMA 2011, NDRF Schwab, ed., 2014, Exec Summary Schwab, ed., 2014, Chapter 6 FEMA 2017a	Recovery from big disasters	Recovery planning in the US <i>Essay 1 due</i> <i>Assign International Recovery Case groups</i>

	(Also be aware of FEMA 2017b)		
10/23	Olshansky 2006 Rivlin 2015 (Reference: Olshansky et al 2008) Olshansky&Johnson 2010 City of New Orleans, 2015 NORA 2015	New Orleans 2005-6	Invited Skype Guest: Jeff Hebert, Deputy Mayor, Chief Resilience Officer, City of New Orleans
10/30	Iuchi, Maly & Johnson 2015 Mochizuki 2014	Recovery case: 2011 Japan tsunami	---no class---
11/6	Balachandran 2010 (reference: Thiruppugazh 2010)	Recovery case: 2001 Gujarat Earthquake Guest: B.R. Balachandran	International recovery presentations (2)
11/13		International recovery presentations (2)	International recovery presentations (2) <i>Recovery Reports due</i>
Break	Happy Thanksgiving!	X	X
11/27	Schwab ed., 2014, Chapter 1 HUD, 2015, pp. 1-13 HUD, 2015, pp. 19-30 Poland, 2009 Rockefeller Foundation (Reference Bolstad 2016)	Resilience revisited Skype Guest: Laurie Johnson	100 Resilient Cities Invited Skype Guest: Aaron Koch, Chief Resilience Officer, City of Chicago
12/4	Readings TBA	International development and disaster risk reduction Guest: B.R. Balachandran	TBD*
12/11	Readings TBA	TBD*	Wrap-up: Q&A <i>Distribute Essay 2</i>

*The last few class meetings will likely consist of a combination of the following current cases:

Cedar Rapids 2008 flood and ongoing planning

Sea level rise, and living with water: Florida, New York (NY Rising, Rebuild by Design)

The Louisiana Safe program

Final Exam schedule—7:00-10:00 pm on Friday December 15th (no exam, but *Essay 2 due* at this time)

READINGS

All assigned readings are listed below. Readings without web links are in pdf files on the Compass site.

44 CFR Secs 201 and 206, Hazard Mitigation Planning and Hazard Mitigation Grant Program

<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&sid=e63c0b17b2c76390184c081f4e63611d&rgn=div5&view=text&node=44:1.0.1.4.53&idno=44>

Balachandran, B.R. 2010. Planning the Reconstruction of Bhuj, pages 159-203 in Shirish Patel and Aromar Revi, eds., *Recovering from Earthquakes: Response, Reconstruction, and Impact Mitigation in India*, Routledge.

Bolstad, Erika. 2016. Coastal Cities Look to Resilience Chiefs to Combat Climate Change. *Scientific American*, May 23, 2016. <http://www.scientificamerican.com/article/coastal-cities-look-to-resilience-chiefs-to-combat-climate-change/>

Boyd, Eugene. 2011. *Community Development Block Grant Funds in Disaster Relief and Recovery*. Congressional Research Service Report for Congress, Washington, D.C. Order Code RL33330, September 21, 2011. <http://www.fas.org/sgp/crs/misc/RL33330.pdf>

City of New Orleans. 2015. *Resilient New Orleans*. Read Executive Summary, pp. 4-5, and skim the rest. http://resilientnola.org/wp-content/uploads/2015/08/Resilient_New_Orleans_Strategy.pdf

Earthquake policy news items:

“L.A. landlords and tenants will share earthquake retrofit costs under deal approved by City Council,” *LA Times*, January 13, 2016. <http://www.latimes.com/local/lanow/la-me-ln-retrofit-20160113-story.html>

“How Oregon Schools Are Preparing For A Megaquake” *Oregon Public Broadcasting*, September 29, 2015. <http://www.opb.org/news/series/unprepared/oregon-earthquake-schools-infrastructure-cascadia-subduction/>

“‘We should be screaming’ with outrage: State does little to protect schoolkids from earthquake, tsunami,” *Seattle Times*, July 13, 2016. <http://www.seattletimes.com/seattle-news/times-watchdog/is-your-child-safe-washington-state-does-little-to-protect-older-schools-from-earthquakes-tsunami/>

“Buildings that kill: The earthquake danger lawmakers have ignored for decades,” *Seattle Times*, May 16, 2016. <http://www.seattletimes.com/seattle-news/times-watchdog/buildings-that-kill-the-earthquake-danger-lawmakers-have-ignored-for-decades/>

FEMA. 2017a. *Pre-Disaster Recovery Planning Guide for Local Governments*. FEMA Publication FD 008-03, February 2017. Pages 1-28. <https://www.fema.gov/media-library-data/1487096102974-e33c774e3170bebd5846ab8dc9b61504/PreDisasterRecoveryPlanningGuideforLocalGovernmentsFinal50820170203.pdf>

- FEMA. 2017b. Community Recovery Management Toolkit. Web-based collection of resources, last updated August 2017. <https://www.fema.gov/national-disaster-recovery-framework/community-recovery-management-toolkit>
- FEMA. 2016. FEMA.gov: *History; Statutory Authority; Executive Order 12127; A New Mission, Homeland Security*. <http://www.fema.gov/about-agency>. Also look at FEMA brochure, <http://www.fema.gov/pdf/about/brochure.pdf>
- FEMA. 2013. *Local Mitigation Planning Handbook*, Introduction, Task 3, Task 5, Task 6, Task 9, and Worksheet 6.1. http://www.fema.gov/media-library-data/20130726-1910-25045-9160/fema_local_mitigation_handbook.pdf
- FEMA. 2011. *Answers to Questions About the NFIP*, FEMA F-084 (pp. 1-8, 24-26) http://www.fema.gov/media-library-data/20130726-1438-20490-1905/f084_atq_11aug11.pdf
- FEMA. 2011. *National Disaster Recovery Framework: Strengthening Disaster Recovery for the Nation*. September, 2011. <http://www.fema.gov/pdf/recoveryframework/ndrf.pdf>
- Godschalk, David R. 2010. "Integrating hazards into the implementation tools of planning," Chapter 5 (pp. 47-58) in Schwab, James C., ed., *Hazard Mitigation: Integrating Best Practices into Planning*, Planning Advisory Service Report No. 560, American Planning Association, Chicago.
- HUD Office of Policy Development and Research. 2015. *Evidence Matters*, Winter 2015. http://www.huduser.org/portal/periodicals/em/EM_Newsletter_winter_2015.pdf
Federal Disaster Policy: Toward a More Resilient Future, pp. 1-13.
Preparing for the Next Disaster: Three Models of Building Resilient Communities, pp. 19-30
- Illinois Department of Natural Resources. 2001. *Floodplain Management Quick Guide*. http://www.dnr.illinois.gov/WaterResources/Documents/Resman_ILFPMQuickGuide.pdf
- Iuchi, Kanako; Elizabeth Maly; and Laurie Johnson. 2015. Three Years After a Mega-Disaster: Recovery Policies, Programs and Implementation After the Great East Japan Earthquake. Pages 29-46 in *Post-Tsunami Hazard*, V. Santiago-Fandiño et al (eds.), Springer International.
- Jha, Abhas K, Jennifer Duyn Barenstein, Priscilla M. Phelps, Daniel Pittet, and Stephen Sena. 2010. *Safer Homes, Stronger Communities: A Handbook for Reconstructing after Natural Disasters*, World Bank, International Bank for Reconstruction and Development, Washington D.C. (Introductory notes and guiding principles).
Full report is at <https://www.gfdrr.org/sites/gfdrr.org/files/SaferHomesStrongerCommunitites.pdf>
- Johnson, Laurie A., and Olshansky, Robert B. 2016. *After Great Disasters: How Six Countries Managed Community Recovery*. Policy Focus Report, Lincoln Institute of Land Policy, Cambridge MA. https://www.lincolnst.edu/pubs/3679_After-Great-Disasters
Chapter 1 (pp. 6-13)
Chapter 8 (pp. 57-63)
- King, Rawle O. 2013. *The National Flood Insurance Program: Status and Remaining Issues for Congress*. Congressional Research Service report for Congress R42850, February 6, 2013. <http://www.fas.org/sgp/crs/misc/R42850.pdf>

- Lindsay, Bruce R. 2014. *FEMA's Disaster Relief Fund: Overview and Selected Issues*. Congressional Research Service, Report R43537. <https://www.fas.org/sgp/crs/homesecc/R43537.pdf>
- Mochizuki, Junko. 2014. Decision-Making, Policy Choices and Community Rebuilding after the Tohoku Disaster. *Journal of Integrated Disaster Risk Management* 4(2): 103-118. <http://idrimjournal.com/index.php/idrim/article/view/85/Pages%20103-118>
- National Earthquake Hazards Reduction Program, 2016, *About Us*. <http://www.nehrp.gov/about/history.htm>
- New Orleans Redevelopment Authority (NORA). 2015. Year in Review. <http://redevelop.nola.gov/NORA-YiR-2015.pdf>
- Olshansky, Robert B., and Laurie A. Johnson. 2010. *Clear as Mud: Planning for the Rebuilding of New Orleans*. APA Planners Press, Chicago, IL. (Chapter 8: Conclusions, pp. 217-242).
- Olshansky, Robert B., and Jack D. Kartez. 1998. "Managing Land Use to Build Resilience," Chapter Six in R.J. Burby, ed., *Confronting Natural Hazards: Land-Use Planning for Sustainable Communities*, Washington, D.C.: National Academy/Joseph Henry Press, pp. 167-201.
- Olshansky, Robert B., Laurie A. Johnson, Jedidiah Horne, and Brendan Nee. 2008. Planning for the rebuilding of New Orleans. *Journal of the American Planning Association*. 74(3): 273-287.
- Olshansky, Robert B., 2006. "Planning after Hurricane Katrina," *Journal of the American Planning Association*, 72(2): 147-153, 2006.
- Passerini, Eve. 2000. Disasters as agents of social change in recovery and reconstruction. *Natural Hazards Review*, 1(2) 67-72.
- Poland, Chris. 2009. *The Resilient City: Defining What San Francisco Needs From Its Seismic Mitigation Policies*, SPUR, February 2009. http://www.spur.org/sites/default/files/publications_pdfs/SPUR_Seismic_Mitigation_Policies.pdf
- Rivlin, Gary. 2015. *Katrina: After the Flood*, Simon & Schuster, NY. (pages 158-223)
- Rockefeller Foundation, Resilient City Materials.
 Rockefeller Foundation. 2015. *City Resilience Framework*.
http://www.100resilientcities.org/page/-/100rc/Blue%20City%20Resilience%20Framework%20Full%20Context%20v1_5.pdf
 Chicago's Resilience Challenge. <http://www.100resilientcities.org/cities/entry/chicago#/-/>
 100 Resilient Cities: About Us. <http://www.100resilientcities.org/about-us#/-/>
- Rubin, Claire, editor. 2007. *Emergency Management: The American Experience 1900-2005*. Fairfax, VA: Public Entity Risk Institute.
 Chapter 3: The Expanding Role of the Federal Government: 1927-1950, pp. 49-80.
 Chapter 4: The Formative Years: 1950-78, pp. 81-110.
 Chapter 5: Federal Emergency Management Comes of Age: 1979-2001, pp. 111-160.
- Rubin, Claire. 2006. *Timeline: 100 Years of Seismic Safety in California*. Prepared for California Seismic Safety Commission. http://www.seismic.sdsu.edu/pdf.files/100_Years_Seismic_Safety.pdf

- Schwab, James, editor. 2014. *Planning for Post-Disaster Recovery: Next Generation*, Chicago, Illinois: American Planning Association, Planning Advisory Service Report 576.
https://www.planning.org/pas/reports/pdf/PAS_576.pdf
 Executive Summary, pp. 6-14.
 Chapter 1: The Vision of a Resilient Community, by James Schwab, pp. 16-23.
 Chapter 6: Long-term Recovery Planning: The Process of Planning, by Laurie Johnson, pp. 92-118
- Thiruppugazh, V. and Sudhir Kumar. 2010. Lessons from the Gujarat Experience: Disaster Mitigation and Management, pages 223-237 in Shirish Patel and Aromar Revi, eds., *Recovering from Earthquakes: Response, Reconstruction, and Impact Mitigation in India*, Routledge.
- Tierney, Kathleen J., Michael K. Lindell, and Ronald W. Perry. 2001. *Facing the Unexpected: Disaster Preparedness and Response in the United States*. Washington, D.C.: Joseph Henry Press.
 Chapter 1: Conceptualizing disasters and their impacts, pp. 1-25;
- Tierney, Kathleen. 2014. *The Social Roots of Risk: Producing Disasters, Promoting Resilience*. Stanford CA: Stanford Business Books.
 Chapter 3: A Different Perspective: The Social Production of Risk, pp. 31-49
 Chapter 6: Communities and Societies at Risk, pp. 125-159
 Chapter 7: Defining Resilience in Relation to Risk, pp. 160-196
- Torsell, Carolyn V., and Jared C. Nagel. 2015. *Federal Disaster Assistance Response and Recovery Programs: Brief Summaries*. Congressional Research Service Report for Congress, Washington, D.C. Order Code RL31734, July 9, 2015. <http://fas.org/sgp/crs/homesec/RL31734.pdf>
- Wiley, Kip. 2000. *A History of the California Seismic Safety Commission*, SSC 2000-04, December 2000. Look at pages 9-45. http://www.seismic.ca.gov/pub/CSSC_HISTORY.pdf

ASSIGNMENTS

Readings and Participation

Students are expected to complete all readings prior to class, and are expected to contribute to class discussions with comments and questions. The instructor will post reading questions on Compass prior to most class sessions, and students will submit responses to blog postings on the Compass site.

Everyone should be prepared to participate in class discussions, and instructor will call on students randomly in class. Attendance is expected. But attendance alone does not constitute participation: Students are expected to participate in the course at a professional level.

Integrative Essays

To ensure that each student understands the basic elements of mitigation and recovery, two integrative essays will be assigned. For each essay, the instructor will distribute a question or situation, to which students will provide concise responses of about two to four pages. These will give each student an opportunity to show that they absorbed, integrated, and made sense of the material covered in class and readings. Essays will be expected to describe the key aspects of each assigned topic in a manner that is factually correct, thorough in understanding of the topic, readable, clearly organized, grammatically correct, and concise.

Report on Hazard Mitigation Actions

In groups, students will research ways to mitigate the effects of floods, hurricanes, earthquakes, wildfires, tsunamis, or tornadoes, as applied to six selected US cities. Each group will make a presentation to the class, proposing the highest priority mitigation methods for two types of natural hazards in their city. Each group also will review the work of one of the other groups.

Report on an International Recovery Case

In groups, students will research the recovery process following a large U.S. or international disaster that occurred within the past two decades. Each group will prepare a presentation to the class and submit a report summarizing their findings. Each group also will critique one of the other groups.

Student Conduct and Accessibility

Disability Services: This course will accommodate students with documented disabilities. Please refer to the Disability Resource Guide (<http://www.disability.illinois.edu/disability-resource-guide>) for more information and inform the instructor of any requests at the beginning of the semester.

Academic Integrity: The UIUC Student Code (<http://www.admin.illinois.edu/policy/code>) requires all students to support academic integrity and abide by its provisions, which prohibit cheating, fabrication, plagiarism, and facilitation of these and related infractions. According to Section § 1-401, “students have been given notice of this rule by virtue of its publication” and “regardless of whether a student has actually read this rule, a student is charged with knowledge of it.” The provisions of the Student Code are applicable to this course. *In written work, all ideas (as well as data or other information) that are not your own must be cited.*

Diversity: The Department of Urban and Regional Planning (DURP) is committed to creating an environment of inclusion and opportunity that is rooted in the very goals and responsibilities of practicing planners. Conduct that interferes with the rights of another or creates an atmosphere of intimidation or disrespect is inconsistent with the environment of learning and cooperation that the program requires. By enrolling a course in the Department of Urban and Regional Planning, students agree to be responsible for maintaining a respectful environment in all DURP activities, including lectures, discussions, labs, projects, and extracurricular programs. We will be governed by the University Student Code. Please see the *Student Code Article 1—Student Rights and Responsibilities* for further details (<http://admin.illinois.edu/policy/code>).

Counseling: The UIUC Counseling Center is available to help students develop coping skills in order to address emotional, interpersonal, and academic concerns. If you have personal issues that are impeding your studies, I encourage you to contact them at <https://counselingcenter.illinois.edu/>.