

SEMESTER AT SEA COURSE SYLLABUS
University of Virginia, Academic Sponsor

Voyage: Spring 2015

Discipline: Architecture & Architectural History

ARCH 3500 & ARH 3500-102: Sustainable Communities and the Global Environment

Division: Upper

Faculty Name: Daphne Spain

Credit Hours: 3; Contact Hours: 38

Pre-requisites: None

COURSE DESCRIPTION:

Climate change, rising seawaters, and severe weather events are threatening coastal communities across the globe. Communities with the ability to cope with such extreme challenges are often referred to as “resilient” or “sustainable” because they implement policies that benefit present and future residents. The ways in which communities demonstrate resilience and sustainability and the factors that determine the speed and effectiveness of their responses, however, are varied—influenced by their distinctive social, institutional, environmental, and economic circumstances.

Sustainable Communities and the Global Environment is a three-credit course that explores the impacts of climate change on the rapidly urbanizing cities of the Global South, critically examines the idea of sustainability, and explores the various ways local governments and other stakeholders are working to manage climate change and enhance community sustainability.

In the classroom, students will read and debate important theoretical and analytical scholarship on sustainability, climate change, and rapid urbanization. The field lab will be conducted in Cape Town, where students will meet with local planning professionals, city leaders, and other experts to discuss issues associated with rapid urbanization and climate change. Students will be given an overview lecture and have the opportunity to tour the city with these professionals. Visits will be arranged to the areas most at risk for climate impacts; these might be low lying neighborhoods, specific fishing areas, the local port, or even the city’s core/downtown.

COURSE OBJECTIVES:

The course has four main goals. By the end of the course students should:

- 1) Understand processes of climate change and global urbanization and their implications for national and sub-national development, environmental quality, and social stability/equity;
- 2) Develop a critical understanding of the concept of sustainability.
- 3) Understand the role of public policy and urban planning processes in managing urban environments to ensure sustainability, manage risk, and ensure human health and livelihoods.
- 4) Understand of the range of tools currently being implemented to manage climate change adaptation in urban areas.

REQUIRED TEXTBOOKS:

Beatley, Timothy. 2009. *Planning for Coastal Resilience: Best Practices for Calamitous Times*. Washington, DC: Island Press; ISBN #: 978-1-59726-562-1

Funk, McKenzie. 2014. *Windfall: The Booming Business of Global Warming*. New York: Penguin Press. ISBN# 978-1-59420-401-2

Martine, G., et al., (editors). 2008. *The New Global Frontier: Urbanization, Poverty and Environment in the 21st Century*. London: Earth Scan. ISBN # 978-1-84407-560-7

TOPICAL OUTLINE OF COURSE

A1- January 9: Class Introduction

Class Period Activity: Review of Syllabus and grading policy; Introductions
Readings: None

A2- January 11: Urban Conditions: The Challenge of Rapid Urbanization in the Cities of the Global South

In Class Activity: Lecture and Discussion Readings: Haghshenas et al., 2013;
Martine volume: Chapters 1-3

A3- January 13: Understanding Global Warming

In Class Activity: Film: Global Warning: the Signs and the Science
Readings: Martine volume: Chapters 8-10; Kovats and Akhtar, 2008

January 14: Hilo

A4- January 16: Climate Change and Its Urban Impacts

In Class Activity: Discussion Readings: Martine volume, Chp. 12
Listen: <http://www.npr.org/2013/05/18/185068648/impossible-choice-faces-americas-first-climate-refugees> and read:
<http://www.guardian.co.uk/environment/interactive/2013/may/13/newtok-alaska-climate-change-refugees>

A5- January 18: Can Cities be Sustainable?

In class activity: lecture and discussion
Readings: Dassen, 2012; Rees and Wackernagel, 1996; Reeves, 2014

A6- January 22: Disasters and Sustainability: The Kobe Experience

In class activity: lecture and discussion
Readings: Horwich, 2000; Shaw and Goda, 2004

A7- January 24: Natural Disasters: the Kobe earthquake

In Class activity:
Video (one in 4 parts, it is very good; available on the ship via the class folder):
<http://www.youtube.com/watch?v=9qY5Y45sqs4> (Kobe, part 1—the break is abrupt!); <http://www.youtube.com/watch?v=YjsNXcvoq-o> (Kobe, part 2—the break is abrupt again!); <http://www.youtube.com/watch?v=KS0Fy1YqzVM> (Kobe, part 3) <http://www.youtube.com/watch?v=l-yCBYUBrJc> (Kobe, part 4)

January 26-31: Yokohama, transit, Kobe

A8- February 1: What is Resilience? (And is It Useful?)

In Class Activity: Discussion: Kobe Earthquake Lessons Learned

Readings: Beatley, 2009 Chp 1 (everyone)

Group A: Rees, 2010; Adger, 2000

Group B: Dyer and McGuinness, 1995; Folke, et al., 2010

Recommended: for China, Martine volume, Chp. 20 (8 pages)

Quiz: (10% of grade)

February 3-8: Shanghai, transit, Hong Kong

A9- February 9: Vietnamese Women and the Sustainable City

In Class Activity: Lecture and Discussion

Readings: Phuong; Truitt, 2008

February 11-16: Ho Chi Minh City

A10- February 17: Climate Change and Population

Movements In Class Activity: Watch Film *Climate*

Refugees and Discuss

February 19-20: Singapore

A11- February 22: Coastal Vulnerability and Disaster Planning

In Class Activity: Lecture and discussion

Readings: Beatley, 2009, Chp. 2; Brecht, et al.,

2013; Funk 2014, Introduction and Chapter 10;

Kabat & Vellinga, 2005

February 24-March 1: Rangoon

A12- March 2: Responding to Climate Change—Issues of Risk and Risk Perception

In Class Activity: Small Group Discussion

Readings: All - Funk, Chapters 2 & 6

Group A: Leiserowitz, 2005; Lorenzoni and Pidgeon, 2006

Group B: O’Conner et al, 1999; Dessai, et al., 2004

A13- March 4: Sustainability in Cochin, India

Class activity: Discussion

Readings: Funk, Chapter 9; Thomson, 2009; Wilbanks et al. 2007

March 6-11: Cochin

A14- March 12: Impressions of Cochin (all students, informal discussion)

A15- March 15: Resilient Cities: What they can and cannot do

In Class Activity: Film: <http://www.youtube.com/watch?v=ugv0OY6LyuE> (Bill Rees lecture)

Readings: Beatley, 2009, Chp. 9 and 10

A16- March 17: Adaptation Strategies – American Examples

In class activity: lecture and discussion

Readings: Morello-Frosch et al., 2011; Saavedra & Budd, 2009

QUIZ (10 % of grade)

March 18: Port Louis

A17- March 20: Preparing for Cape Town

In Class Activity: discussion of Cape Town readings

Readings: Anderson, 2012; Swilling, 2010

A18- March 23: Preparing for Field Lab in Cape Town

Readings: None

March 25-30: Cape Town
Field Lab, March 25

A19- March 31: Review of Field Lab (all students, informal discussion)

April 2-6: Walvis Bay

A20- April 7: Differing Views of the Private Sector

In Class Activity: Field lab discussions

Readings: Funk 2014, Chapters 7 & 8; Macomber

A21- April 9: Planning for Coastal Resilience—How to Influence Human Behavior toward Natural Resources

In Class Activity: Small Group Discussion

Readings: Hardin, 1969; Ostrom, et al., 1999

A22- April 12: Group Meeting Time (for work on final project and consultation with professor)

Readings: None

FIELD LAB PROJECT DUE (20% OF GRADE)

A23- April 15: Returning to Human Factors: Building Social Resilience

In Class Activity: Small Group Discussion

Readings: Adger, et al., 2009; O'Brien, et al., 2009

A24- April 17: Casablanca and Globalization

In class activity: group discussion

Readings: Barbanente et al., 2007; Saadi, 2012

April 18-22: Casablanca

A25- April 25: Class Summary

April 29: Arrive in Southampton

FIELD WORK

Field lab attendance is mandatory for all students enrolled in this course. Please do not book individual travel plans or a Semester at Sea sponsored trip on the day of our field lab. The field lab for this class will take place in Cape Town on March 25.

FIELD LAB (At least 20 percent of the contact hours for each course, to be led by the instructor.)

- The field lab will be conducted in Cape Town, where students will meet with local planning professionals, city leaders, and other experts to discuss issues associated with rapid urbanization and climate change. Students will be given an overview lecture and have the opportunity to tour the city with these professionals. Visits will be arranged to the areas most at risk for climate impacts; these might be low lying neighborhoods, specific fishing areas, the local port, or even the city's core/downtown.
- Once the field visit is done, an informal sharing/presentation of city observation experiences will take place (almost immediately thereafter) on the dates listed on the syllabus. For this the expectation is that students will present photos, general impressions, and learning "take aways" that reflect the main topics of the course.
- A 5-6 page written summary of your presentation, due April 12, will be the basis for your Field Lab grade.

OTHER FIELD ASSIGNMENTS

- Students are required to conduct urban observations in at least 2 cities, other than Cape Town, that connect the readings about the city with your observations. Write up your findings in a 500-word essay; each of which is worth 10 points and is due by the second class day after the port stop.

METHODS OF EVALUATION/ GRADING RUBRIC

A word about punctuality and participation: Students are expected to arrive on time for class, and I will pick up the attendance sign-in sheet 5 minutes after class begins. Class participation in the form of asking or answering at least one question (based on readings) per class session will be figured into your final grade. If we run out of time for everyone to contribute, you may hand in your question at the end of the class.

The final grade will be calculated using the following criteria:

Quizzes (2@10 pts)	20
Class participation	20
Field lab	20
City observations (2@ 10 pts)	20
Final exam	20

RESERVE LIBRARY LIST

Beatley, Timothy. 2009. *Planning for Coastal Resilience: Best Practices for Calamitous Times*. Washington, DC: Island Press.

Funk, McKenzie. 2014. *Windfall: The Booming Business of Global Warming*. New York: Penguin Press.

Martine, G., et al., (editors). 2008. *The New Global Frontier: Urbanization, Poverty and Environment in the 21st Century*. London: Earth Scan.

ELECTRONIC COURSE MATERIALS: See Bibliography below

HONOR CODE

Semester at Sea students enroll in an academic program administered by the University of Virginia, and thus bind themselves to the University's honor code. The code prohibits all acts of lying, cheating, and stealing. Please consult the Voyager's Handbook for further explanation of what constitutes an honor offense.

Each written assignment for this course must be pledged by the student as follows: "On my honor as a student, I pledge that I have neither given nor received aid on this assignment." The pledge must be signed, or, in the case of an electronic file, signed "[signed]."

Bibliography

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- Adger W. Neil, Suraje Dessai, Marisa Goulden, Mike Hulme, Irne Lorenzoni, Donald, Nelson Lars, Otto Naess, Johanna Wolf, and Anita Wreford. 2009. "Are there social limits to adaption to climate change?" *Climate Change* 93:335-354.
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- Anderson, Pippin M.L., Patrick J. O'Farrell. 2012. "An Ecological View of the History of the City of Cape Town" *Ecology and Society* 17. 3:28.
- Barbanente, Angela, Domenico Camarda, Laura Grassini, Abdul Khakee. 2006. "Visioning the regional future: Globalization and regional transformation of Rabat/Casablanca" *Technological Forecasting & Social Change* 74: 763-778. (Elsevier Inc).
- Brecht, Henrike, Uwe Deichmann, and Hyoung Gun Wang. 2013. "A Global Urban Risk Index" *The Policy Research Working Paper Series* 650.
- Dassen, Ton, Eva Kunseler, and Lieke Michiels van Kessenich. 2013. "The Sustainable City: An Analytical- Deliberative Approach to Assess Policy in the Context of Sustainable Urban Development" *Sustainable Development* 21: 193-205.
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- Dyer, Janyce, and Teena Minton McGuinness. 1996. "Resilience: Analysis of the Concept" *Archives of Psychiatric Nursing* 10. 5: 276-282.
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- Kabat, Pavel, Wim van Viersen, Jeroen Veraart, Pier Vellinga, and Jeroen Aerts. 2005. "Climate proofing the Netherlands". *Nature* 438: 283-284. (Nature Publishing Group).
- Kovats, Sari and Rais Akhtar. 2008. "Climate, Climate change and human health in Asian cities" *Environment & Urbanization* 20: 165-175. (International Institute for Environment and Development).
- Leiserowitz, Anthony A. 2005. "American Risk Perceptions: Is Climate Change Dangerous" *Risk Analysis* 25, 6. (Society of Risk Analysis).
- Lorenzoni, Irene, and Pidgeon, Nick. 2006. "Public Views on Climate Change: European and USA Perspectives". *Climate Change* 77: 73-95.
- Macomber, John D. 2013. "The Big Idea". *Harvard Business Review* 42-50.
- Morello-Frosch, Rachel, Phil Brown, Mercedes Lyson, Alison Cohen, and Kimberly Krupa. 2011. "Community Voice, Vision, and Resilience in Post- Hurricane Kathrine Recovery". *Environmental Justice* 4. 1: 71-80.
- O'Brien, Karen, Bronwyn Hayward and Fikret Berkes. 2009. "Rethinking Social Contract: Building Resilience in a Changing Climate" *Ecology and Sociology* 14.12.
- O'Connor, Robert E, Richard Bord and Ann Fisher. 1999. "Risk Perceptions, General Environmental Beliefs, and Willingness to Address Climate Change" *Risk Analysis* 19, 3(Society of Risk Analysis).

- Ostrom, Elinor, Joanna Burger, Christopher B Field, Richard B Norgaard, and David Policansky. 1999. "Revisiting the Commons: Local Lesson, Global Challenges". *Science* 284: 278-282.
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- Reeves, Dory. 2009. "Putting women and gender in the frame- A consideration of gender in the Global Report on Human Settlement Planning Sustainable Cities". *Habitat International* 43: 283-298.
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Truitt, Allison. 2008. "On the back of a motorbike: Middle-class mobility in Ho Chi Minh City, Vietnam". *American Ethnologist* 35:3-19.

Wilbanks, Thomas J, Timothy Ensminger, and C.K. Rajan. 2007. "Climate change vulnerabilities and responses in a developing country city". *Environment* 49.5: 24-33.

The following chart details the required textbooks for each course at ACHS. Required textbooks are included in the total course price and automatically shipped to students when their registration is processed. Students may also elect to purchase their own publisher textbooks including opportunities to purchase used textbooks and take advantage of textbook rental services. Students buying their own textbooks must ensure they have the correct edition for the current semester. TextbookRentals. Amazon. Chegg. REQUIRED TEXTBOOKS THE INTERNATIONAL SUMMER SCHOOL - 2015 The textbooks required for The International Summer School are listed below by individual class and are now available for purchase through the UNO Bookstore. For each text we have listed the title, author, edition, publishing company and ISBN. Textbooks will NOT be available for purchase on site in Innsbruck. If a book is Translations of the phrase REQUIRED TEXTBOOKS from english to french: ...are responsible for purchasing any required textbooks or materials. Translation of "required textbooks" in French. Results: 58600, Time: 0.1008. required. necessaires exige requis tenus necessite. textbooks. des manuels des manuels scolaires des livres des livres scolaires. Examples of Required Textbooks in a Sentence.