SEMESTER AT SEA COURSE SYLLABUS

Voyage: Spring 2014
Discipline: Urban and Environmental Planning
PLAN 5500-501 and 502: Resilient Communities
Division: Upper
Faculty Name: Ellen Bassett

Pre-requisites: None.

COURSE DESCRIPTION:

In 2007, the earth's population became more urban than rural, launching what some have dubbed the "urban millennium." The process of rapid urbanization has created myriad challenges for city residents, local leadership, and national governments including massive demands for housing, access to potable water and sanitation, and infrastructure for transportation and energy distribution. The disruptions associated with rapid urbanization, moreover, are exacerbated by one of the most significant environmental challenges in human history: climate change. Our nation's experience with Hurricane Sandy in October of 2012 and its impact upon communities along the eastern seaboard graphically illustrated how climate change, rising seawaters and severe weather events threaten coastal communities across the globe.

Few groups will be more affected by climate change than the communities living in the exploding port cities of the global south. In particular, slum dwellers—who are the poorest of the poor—are anticipated to be the most at risk. They live literally on the edge. Their marginalized status finds them living on riverbanks, next to wetlands, or perched on hazard-prone slopes. They have little money, little power, and few rights—without secure land or housing tenure they have a tenuous claim to what urban theorists call their "right to the city."

Communities with the ability to cope with such extreme challenges are often referred to as "resilient". The ways in which communities demonstrate resilience and the factors that determine the speed, shape and effectiveness of their responses, however, are varied—influenced by their distinctive social, institutional, environmental, and economic circumstances.

The course Resilient Communities is a three-credit course which will explore the impacts of climate change on the rapidly urbanizing cities of the global south, critically examine the idea of resilience, investigate risk factors in specific cities, and explore the various ways local governments and other stakeholders (globally) are working to manage climate change and enhance community resilience.

In our initial classroom work, students will read and debate important theoretical and analytical scholarship on resiliency, climate change, and rapid urbanization. Students will use in-port time in 3 cities to undertake some on-site data collection/analysis relative to the built and natural environment. This data will serve as a foundation for a longitudinal research project on urban resiliency. For their final group project students will be asked to submit a written report in which they utilize their fieldwork data and formulate recommendations for policies or projects that might facilitate adaptation to climate change and enhance community resilience.

COURSE OBJECTIVES:

The course has 4 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 resilience. Use the concept in a planning analysis.

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; an understanding of the range of tools currently being discussed/utilized to manage climate change adaptation in urban areas;

4) Gain exposure to the basics of research design in the social sciences, critical issues like reliability and validity, the difference between qualitative and quantitative methods, and the ethical dimensions of social research. Apply this knowledge through a structured research assignment.

REQUIRED TEXTBOOKS:

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

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- Class 1 January 12: Class Introduction
Class Period Activity: Review of Syllabus, Self-Introductions (Professor and Students); Quiz (Non-graded)
Readings: None

A2- Class 2 January 14: Urban Conditions: The Challenge of Rapid Urbanization in the Cities of the Global South
In Class Activity: Lecture and Discussion
Readings: Martine volume: Chapters 1-3

A3- Class 3 January 16: Understanding Climate Change and Its Urban Impacts
In Class Activity: Lecture and Discussion
Readings: Martine volume: Chapters 8-10; Kovats and Akhtar, 2008
Watch (before getting on ship)!: http://www.youtube.com/watch?v=ugv0OY6LyuE (Bill Rees lecture)

January 17: Hilo

A4- Class 4 January 19: Climate Change and Population Movements
In Class Activity: Video – *Climate Refugees* (Film needs to be acquired)
Readings: Martine volume, Chp. 12; Barnett and Webber, 2010
Listen (before getting on ship!): 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- Class 5 January 22: Coastal Vulnerability and Disaster Planning
In Class Activity: Lecture
Readings: Beatley, 2009, Chp. 2; Brecht, et al., 2012
Video to watch (before voyage please!):
http://www.aljazeera.com/programmes/101east/2009/05/2009513114937450172.html

January 24: Study Day

A6- Class 6 January 25: What is Resilience? (And is It Useful?)
In Class Activity: Audio recordings followed by discussion of the readings (in small groups)
Readings (*Jigsaw*): Beatley, 2009 Chp 1 (everyone)
Group A: Rees, 2010; Adger, 2000
Group B: Dyer and McGuinness, 1995; Folke, et al., 2010

A7- Class 7 January 27: Disaster and Recovery: Learning from Japan
In Class Activity: Lecture -- The Kobe Earthquake of 1995
Readings: Horwich 2000; Shaw and Goda, 2004
Video (one in 4 parts, it is very good): 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 29- February 3: Yokohama and Kobe

A8- Class 8 February 4: Researching Climate Resilience (1)
In Class Activity: Lecture – Designing Social Research (in a Nutshell!) and Observation as a Research Method; Field Lab data collection discussion (session 1)
Readings: On Methods: Greener, Chp. 1 and 5; Schenshul, et al., 1999, Chp. 4 and 5;
For China (background on its astonishing urbanization) Martine volume, Chp. 20 (8 pages)

February 6-11: Shanghai, transit, Hong Kong

A9- Class 9 February 12: Researching Climate Resilience (2)
In Class Activity: Lecture – Talking to People—Interviews as a Research Method; Field Lab data collection discussion (session 2)
Readings: On Methods: Marshall and Rossman, 2011, Chp. 6

February 14-19: Ho Chi Minh City (First target city for RC Field Lab)

A10- Class 10 February 20: Impressions of Ho Chi Minh City (all students, informal discussion); **Ho Chi Minh City Field Lab Report** (Student Group Presentation)
For Vietnam: Truitt, 2008 *(really try to read this before experiencing HCMC!*)

February 22-23: Singapore

A11- Class 11 February 24: Responding to Climate Change—Issue of Risk and Risk Perception
In Class Activity: Small Group Discussion
Readings (*Jigsaw*): Group A: Leiserowitz, 2005; Lorenzoni and Pidgeon, 2006
Group B: O'Conner et al, 1999; Adger, et al, 1999

February 25: Study Day

February 27-March 4: Rangoon

A12- Class 12 March 5: 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; Coase, 1960

A13- Class 13 March 7: Adaptation Strategies 1—Protection
In Class Activity: Lecture and Discussion
Readings: Klein, et al, 1999; Beatley, 2009, Chps. 3-6; Kabat and Vellinga, 2005

March 9-14: Cochin (Second target city for RC Field Lab)

A14- Class 14 March 15: Impressions of Cochin (all students, informal discussion); **Cochin Field Lab Report** (Student Group Presentation)

March 17: Study Day

A15- Class 15 March 18: Adaptation Strategies 2—Preservation
In Class Activity: Lecture and Discussion
Readings: Beatley, 2009, Chp. 7, 11 and 12; Look at PlaNYC—see how climate change is mainstreamed in document as well as the stand-alone chapter

A16- Class 16 March 20: Adaptation Strategies 3—Retreat
In Class Activity: Lecture and Discussion
Readings: NOAA article on CA communities; NOAA, 2012 (Protecting the Public Interest); Recommended (VA specific study): VIMS, 2013

March 21: Port Louis

A17- Class 17 March 23: Adaptation Strategies 4—Accommodation
In Class Activity: Lecture and Discussion
Readings: Beatley, 2009, Chp. 9 and 10

March 25: Study Day

A18- Class 18 March 26: Choosing the Best Policy—Evaluating Alternatives with Criteria
In Class Activity: Small Group Scenario Debates and Discussions
Readings: Adger, et al., 2005

March 28-April 2: Cape Town (Third target city for RC Field Lab)

A19- Class 19 April 3: Impressions of Cape Town (all students, informal discussion); **Cape Town Field Lab Report** (Student Group Presentation)

A20- Class 20 April 5: Choosing the Best Policy through Bracketology
In Class Activity: NCAA (Nerdy Climate Alternatives Analysis) Playoffs (Small Groups)
Readings: None

April 10-14: Takoradi and Tema

A22- Class 21 April 15: Returning to Human Factors: Building Social Resilience
In Class Activity: Small Group Discussion
Readings (*Jigsaw*): Group A: Morello-Frosh, et al., 2011; Adger, et al., 2009
Group B: O'Brien, et al., 2009; Saaverdra and Budd, 2009

A23- Class 22 April 17: Group Meeting Time (for work on final project and consultation with professor)

April 19: Study Day

A24- Class 23 April 20: Group Meeting Time (for work on final project and consultation with professor)

April 22: Global Lens Finals/Study Day

April 23-27: Casablanca

A25- Class 24 April 28: Presentation of City Analyses and Climate Adaptation Recommendations

May 2: 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. Due to the nature of this class, there are three field labs. Students, however, will participate in a field lab for only one city; this city is determined by the section for which you signed up.

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

- The field lab will be done over two to three days. In the first day, 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 and ask them informed questions.

- On the second field lab day, students will visit the areas they identified as 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. Using the data collection protocols developed with the professor, students will conduct a physical assessment using observation techniques.

- On the third field lab day, students will meet with faculty from a local university and university students studying topics associated with climate change, urbanization, and resilience.

- Once the field visit is done, an informal sharing/presentation of Field Lab experiences with students not participating in that field lab 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 and will be important/applicable to the other groups looking at other cities.

- A final presentation of a city report and recommendations for climate actions will be done on the last

day of class. This presentation will be capped at 15 minutes per group so that there is time for Q and A.

FIELD ASSIGNMENTS

- Additionally student are asked to conduct urban observations—using some or parts of the their observation data collection sheets—in two other cities of their choosing. This assignment is more fluid, but student are asked to observe the physical nature of the city and relate their impressions of the place through a short (1-2) page reflection piece.

METHODS OF EVALUATION / GRADING RUBRIC

Course Requirements:

Active Participation in Jigsaw Discussions (3 of them)	30
Field Lab Presentation	10
Urban Observations (Field Assignments – 2 additional cities)	10
Participation in City Specific Data Collection Project (1city)	25
Group Project: City Analysis and Recommendations (10-15 paper and presentation)	25
	100 points

ADDITIONAL MATERIALS

DVD – Climate Refugees

ELECTRONIC COURSE MATERIALS

A reader plus additional materials for use in the final project are housed on the ship's intranet.

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]."