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Spring 2016 – 3 Credit Hours
FC: SO & GD Credits
Room: Brewster D-202
Time: Tu & Th 2:00pm – 3:15pm
Office Hours: Mon & Wed 2:00 – 4:30pm

PLAN 1900: SUSTAINABLE CITIES



More than 50 percent of the world's population today lives in cities and major metropolitan areas, and by 2050, the number of city dwellers is estimated to reach almost 70 percent of the global population. The concentration of urban populations in cities create massive environmental footprints as urban agglomerations put enormous pressures on transportation systems, housing stock, and infrastructure such as energy, waste, and water, which directly influences the emissions of greenhouse gases. Moreover, cities grapple with and are shaped by contestations and conflicts over urban space, concerns around environmental and social justice, and problems of poverty and food security. This course presents an overview of the critical issues and trends that are shaping cities today and how urban planning, concepts, principles and processes can address the impacts of urban environments and its relationship to the natural environment at a variety of scales from local to global. The course assumes no previous background in the material, and there is no prerequisite to the course. *This course fulfills a Foundations Curriculum Social Science and a Global Diversity requirement.*

COURSE OBJECTIVES

Sustainable Cities aims to craft a global and broad understanding of planning for sustainable urban environments. To meet the needs of freshman level Foundations Curriculum, a student successfully completing Sustainable Cities will be able to:

- Recognize ways in which urban and regional planning contributes scientific knowledge about society.
- Identify core concepts and principles in the discipline of planning at local, metropolitan, regional, and global scales.
- Recognize that urban and regional planning inter-relates geographic, political, economic, social, cultural, and environmental components of knowledge to improve settlements and habitats.
- Identify the theories, methods, techniques, principles, and values of urban and regional planning, especially as they relate to the pursuit of urban sustainability.
- Recognize the foundational social science ideas of urban sustainability and their connections to cities.
- Interpret the application of concepts and ideas for sustainable cities and regions at multiple scales.
- Develop a working planning-focused vocabulary in urban sustainability.
- Describe the evolution of human settlement patterns and global urban growth trends over time.

- Predict the challenges and the range of cumulative impacts that cities will have on the natural environment, locally and globally.
- Outline urban environmental planning issues regarding use and consumption of land, water, and air in cities.
- Discuss how climate change, disasters, poverty, and food security impact and shape cities.
- Examine how cities can and have applied planning concepts and research into their programs, policies, and design to address pressing urban problems.
- Examine the different global solutions to urban problems, and understand the ways in which they are multi-faceted, thus requiring interdisciplinary approaches.
- Explain the role planners' play in shaping urban environments at multiple scales..

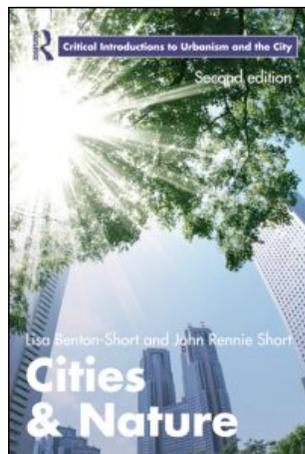
COURSE FORMAT AND REQUIREMENTS

Sustainable Cities consists of weekly interactive classes that are supplemented by textbook readings, exercises, video presentations, field experiences, and written assignments. Students are required to meet standards and performance objectives as specified by the General Education Basic Social Science goals. To engage students actively in their learning process, the course will include reflective writing exercises and hands-on learning through field trips and inquiry-based exercises that are designed to illustrate urban planning processes related to a topic. The activities also aim to strengthen student ability to think critically as they evaluate and assess urban planning approaches to the topic at hand.

REQUIRED TEXTS AND READINGS

There is one required text for this course:

1. Benton-Short, L. & Short, J.R. 2013, **2nd Ed.** *Cities and Nature*. New York: Routledge. (Price: \$54.37)



Other course readings are based on book chapters and journal articles and are posted on Blackboard. Readings can be found under section titled 'Course Documents', organized according to weekly themes.

**ATTENDANCE AND PARTICIPATION
(15% OF FINAL GRADE)**

Student presence and participation is fundamental to meeting the objectives of this course. Students will engage in several inquiry-based in-class exercises and a field trip during the course. You are expected to attend classes regularly, read and watch all assigned materials, and come prepared to participate in class. ***Absences will be counted from the first class and there will be no more than two excused absences, barring exceptional circumstances. One-half percent point will be deducted for each consecutive absence.***

Two percent points will be deducted for students engaging in excessive texting and internet surfing during class throughout the semester.

The in-class participation grade will be based on your attendance record and your capacity to engage seriously and constructively in weekly classroom activities. The focus of participation is on preparedness, quick thinking, and the capacity to engage with the exercises on hand.

**COURSE EXERCISE ESSAYS THROUGH REFLECTIVE ONLINE JOURNAL
(60% OF FINAL GRADE, TOTAL 4 EXERCISES)**

You will prepare written response to course exercise questions. The objective of this assignment is to allow students to critically reflect on the exercise, discuss the role of ethics and values related to the topic, and to make connections between theory and the real world. The cumulative set of student writing will become an online journal that reflects a student's learning process in the course through the semester.

Breakdown of Exercise Grade

Course Exercise	Percentage
Ecological Footprint Exercise	15%
Envision the Sustainable City	15%
Poverty Exercise	15%
Urban Sustainability Rating Systems Exercise	15%

Your journal page is available through the course Blackboard site. Click on the Menu tab 'Tools' and select the button titled 'Journals'. Click on the appropriate journal topic link listed there. **DO NOT ATTACH MS WORD DOCUMENT** to your journal entry. Your journal text should be typed into the space provided on the 'Create Journal' page.

**FINAL EXAM – THURSDAY, APRIL 28, 2:00-4:30PM
(25% OF FINAL GRADE)**

Multiple choice exam. Each correct answer gets 0.5 points for a total of 25 points for 50 correct answers. Bring BLUE scantron and pencil/pen.

FOUNDATIONS CURRICULUM SOCIAL SCIENCE COURSE GOALS

Goal 1. *Students will learn the subject matter of at least one discipline in the basic social sciences.*

Students in PLAN 1900 Sustainable Cities will:

- Identify core concepts and principles in the discipline of planning at local, metropolitan, regional, and global scales, including relationship between the built and the natural environment, and an understanding of socio-economic and political processes that shape urban planning outcomes.
- Recognize the foundational social science ideas of urban sustainability and their connections to cities, through discussions on the definitional issues of urban sustainability, sustainable development, and the three E's of sustainability: social equity, environmental protection, and economic development.
- Develop a working planning-focused vocabulary in urban sustainability through familiarity with key terms such as: modeling urban sustainability, sustainability indicators, urban adaptation, climate action planning, resiliency building, remaking suburbia, urban ecological planning, land use change, scenario-based planning, urban density, urban revitalization, public participation, food deserts, food security, watershed, transit oriented development, hazard mitigation planning, megacities, and urban heat island.

Goal 2. *Students will learn the research methodology, principles and concepts required to understand and conduct undergraduate-level research in the social sciences.*

Students in PLAN 1900 Sustainable Cities will be introduced to quantitative and qualitative methods employed in urban planning. Employing active-learning exercises, students will:

- Critically think about and evaluate planning approaches and solutions to current pressing issues at multiple urban scales.
- Acquire primary data from web-based real-time data sources (e.g., data from official public website of a city or metropolitan area).
- Evaluate social science focused planning data using a combination of quantitative and qualitative methods (e.g., review and analyze a municipal sustainability indicator program).
- Draw conclusions in narrative form through writing exercises that critically reflect upon the analysis and data limitations.
- Relate experience to urban sustainability concepts through methods and knowledge in urban planning.

Goal 3. *Students will learn about the discipline's contribution to general knowledge.*

Students in PLAN 1900 Sustainable Cities will:

- Gain an in-depth appreciation of cross cutting issues, concepts, and solutions that underlie planning and the importance of its principles for sustainable urbanization.
- Examine how cities can and have applied planning concepts and research into their programs, policies, and design to address pressing urban problems.
Recognize the impacts of urban environments at multiple scales and the role of urban planning and planners in mitigating these impacts.

GLOBAL DIVERSITY COURSE GOALS

Goal 1. *Students understand how cultural beliefs and values shape people's perceptions and impact global decisions and actions.*

Students in PLAN 1900 Sustainable Cities will:

- Analyze underlying socio-economic and political beliefs and values that influence public concern and legislative action to understand the compelling connections between global concerns and local efficacy and action in the history of urban planning.
- Gain knowledge about larger sustainability issues starting from a personal value-based level through exercises such as calculating individual global ecological footprint that asks students to develop their own footprint, analyze its implications, and evaluate what they could do to lower their impact.
- Examine individual consumption behaviors and the resultant cost to the planet in terms of volume of waste products, life cycle cost, carbon dioxide emissions, and possible injustice issues. Students will compare such practices for cities in various countries to develop an understanding of social relations, political power, economic concerns, and ethics that can hinder or promote sustainable practices.
- Identify the importance of values and ethics that are interwoven through the readings and discussed within numerous contexts at local and global scales through case studies on topics such as environmental justice and the history of environmental catastrophes.

Goal 2. *Students apply critical thinking skills to evaluate global issues and events from multiple perspectives.*

Students in PLAN 1900 Sustainable Cities will:

- Carry out ethics based evaluation and critical thinking about changes in behavior, both, at the individual and societal levels to recognize the important of consumption patterns in local to global transformations.
- Examine the different global solutions to urban problems, and understand the ways in which they are multi-faceted and culturally specific, thus requiring interdisciplinary approaches.
- Discern the positive impacts that sustainable actions and programs achieve and how best to measure those changes through case studies at local and global scales.
Assess how cities around the world are confronting global issues such as impacts of climate change and hazard risks at the local level, through various adaptation and mitigation efforts.

COURSE POLICIES

Grading: The final grade for this course is based on a combination of course activities and assignments. The specific performance objectives will be assessed through the evaluation of the in-class exercises and activities, reflective written assignments, a mid-term project or exam, and one final examination. The grade breakdown and grade scale are given below.

Grade Breakdown

Activities	Percentage
Attendance and Participation in Class Exercises	15%
Course Exercises	60%
Final Exam	25%
Total	100%

Grade Scale

Letter Grade	Point Range	Description	Elaboration
A	94 - 100	Excellent	Student work shows: integration of course readings, lectures, and exercises; clear articulation of the thoughts of the writer; and production of error-free written materials. For students who go the extra mile.
A-	90 - 93		
B+	87 - 89	Above average	Much better than just good. Very good quality of work in terms of thoroughness and presentation.
B	84 - 86		
B-	80 - 83		
C+	77 - 79	Average	Work is sufficient and acceptable. Could have done better.
C	74 - 76		
C-	70 - 73		
D	60 - 69	Poor	Sub-par on all levels. Bare or minimal effort.
F	<60	Failure	

“A” students demonstrate a mastery of the material covered and provide insightful thought and reflection on assigned readings, exercises, and class discussions. Grammatically correct writing is expected. “A” students are concise in their arguments, presentation formats, and writing, with an outstanding degree of organization. Numerous grammatical errors, misspellings, vagueness, unsubstantiated arguments, and conflicting language are likely to receive a “C” or lower grade. Students are not graded up or down based on their philosophy or personal/professional/political viewpoints. Students are encouraged to argue persuasively their views without fear that the instructor may or may not agree with them¹.

Incomplete Grade: Incomplete grade is at the discretion of the instructor. This is possible when a student is otherwise passing but has not, due to circumstances beyond his/her control, completed all the work in the course.

Attendance: Your presence and participation is fundamental to meeting the objectives of this course. Absences will be counted from the first class meeting and there will be no more than TWO excused absence, barring exceptional circumstances. Students who register late or miss a class are expected to make up all missed assignments as determined by the instructor. This course will follow the Faculty Senate approved student attendance policy.

Late Works and Missed Assignments: Late work in general will not be tolerated. If you plan to miss a class, please post your journal exercise within 24 hours of the missed class. Alternative arrangement can be made, but only with prior approval. Students are expected to keep track of assignment deadlines and grades. If you are missing a grade, please bring it to the attention of the instructor.

Academic Integrity: Academic integrity is a fundamental value of higher education. The ECU student handbook (http://www.ecu.edu/cs-studentlife/policyhub/academic_integrity.cfm) outlines the student code of conduct and academic integrity policy and procedures. As an instructor, I will not tolerate *acts of cheating, plagiarism, falsification or attempts to cheat*. The copying of any work in whole or in part and/or quoting verbatim without citation is considered plagiarism and will not be tolerated. Students, whose work has been confirmed as plagiarized: a) will not receive any points for the plagiarized

¹ Weitz, Jerry. Syllabus for PLAN 4096, East Carolina University

assignment, and/or b) in the case of more serious violation will be reported to the Office of Students Rights and Responsibilities and receive a Fail (F) grade for the entire course.

Inclement Weather and Emergencies: In the event of inclement weather or other emergency, information about the status of classes at ECU is available by calling the ECU emergency information hotline (252-328-0062) and on the ECU emergency alert website (<http://www.ecu.edu/alert>).

Students with Disabilities: East Carolina University seeks to fully comply with the Americans with Disabilities Act (ADA). Students requesting accommodations based on a covered disability must go to Disability Support Services, located in Slay 138, to verify the disability before any accommodations can occur. The telephone number is 252-737-1016.

Class Conduct: It is important that we have a classroom atmosphere that optimizes teaching and learning, and we all share the responsibility for creating a civil and non-disruptive forum. Students are expected to conduct themselves at all times in a manner that does not disrupt teaching or learning. Behavior that disrupts the learning process may lead to disciplinary action and/or removal from class as specified in University policies.

Below are some of my *PET PEEVES* – these are common sense respectful behavior that I expect in class.

- Be on time to class. If you need to leave early, please do so without disrupting the rest of the class.
- Do not begin ‘end of class activities’-shuffling papers, putting away things-before class actually ends.
- Turn your cell phones and other audible devices off or put them on vibrate mode while in class. Do not answer phones or text during class.
- Use computers (if you have to) only for class-related activities. Believe me, instructors can tell when you are surfing the net. Computer use for non-class related activity is disrespectful and distracting.
- Read the syllabus closely to check for assignments deadlines and course information. Do not ask for information that is already on the syllabus. I am happy to clarify something you did not understand
- Do not sleep in class.

ECU Retention Policy

GPA Hours at ECU (identified in Transcript in Banner Self Service) plus transferred credit hours	“Old” Retention Requirement All courses taken at ECU	New Retention Requirements Effective with Fall 2011 grades All courses taken at ECU
1-29 semester hours	1.6 GPA	1.8
30-59 semester hours	1.8 GPA	1.9
60-74 semester hours	1.9 GPA	2.0
75 or more semester hours	2.0 GPA	2.0

Office Hours and Email Protocol: Office hours will be held in Brewster A-211 on Mondays and Wednesdays from 2:00pm to 4:30pm. Questions about the course, readings, assignments and exams can be addressed through email as well: mukherjia@ecu.edu. Please give 48 hours for a response. Refer to the course (PLAN 1900) in the subject line.

Final Note: This course syllabus is subject to change with reasonable notice. Changes will be communicated via e-mail and/or verbally in class.

COURSE THEMES AND READINGS

WEEK	DATE	TOPIC	READINGS & COURSE ACTIVITIES FOUNDATION (FC) AND GLOBAL DIVERSITY (GD) GOALS ADDRESSED*
1	Tue, Jan 12	Introduction & Syllabus	Watch: <i>The City</i>
	Thurs, Jan 14		<i>Ecological Footprint Exercise</i> Pijawka & Gromulat (p.254): Determine your individual ecological footprint. (FC: G1, G2, G3) (GD: G1)
2	Tue, Jan 19	Perspectives on Urban Sustainability	Short & Short, Chapter 1, p.1 Pijawka & Gromulat, Chapter 1, p.1 Watch: <i>City of Dreams – Brazil Sustainability Immersion Exercise</i>
	Thurs, Jan 21		DUE: Ecological Footprint Exercise @ 12:00 noon
3	Tue, Jan 26	History of Global Sustainability Movement & Global Urban Trends	Pijawka & Gromulat, Chapter 2, p.25 Short & Short, Chapter 4, p.97 Watch: <i>Urban Transformation, Megacities Envision the Sustainable City Exercise</i>
	Thurs, Jan 28		Pijawka & Gromulat (p.247): Describe your vision of a sustainable city and compare it to a place where you grew up. (FC: G1, G2, G3) (GD: G1)
4	Tue, Feb 2	Planning for Industrial & Post-Industrial Cities	Short & Short, Chapter 3, p.57 Short & Short, Chapter 5 p.121 Watch: <i>The City (Lewis Mumford) Brownfields Exercise</i>
	Thurs, Feb 4		DUE: Envision the Sustainable City Exercise @ 12:00 noon
5	Tue, Feb 9	Environmental Justice in the Global City	Pijawka & Gromulat, Chapter 4, p.75 Short & Short, Chapter 15, p.417
	Thurs, Feb 11		<i>Urban Sustainability Indicator Exercise</i>
6	Tue, Feb 16	What do planners do and other jobs a planning degree can offer?	Guest Panel: Niki Johns, NCAPA Outreach Location: Mendenhall, Room 15
	Thurs, Feb 18	Managing Urban Air Quality Guest Talk: Robert Fisher, Regional Supervisor, NC Division of Air Quality	Short & Short, Chapter 12, p.317 Watch: <i>Air Quality 101 – The Basics</i>
7	Tue, Feb 23	Solid Waste Management Issues in the City Guest Talk: John Demary, Director of Solid Waste, Pitt County, NC	Short & Short, Chapter 14, p.379 Watch: <i>Welcome to Lagos</i>
	Thurs, Feb 25		
8	Tue, Mar 1	Managing Urban Water Resources	Pijawka & Gromulat, Chapter 5, p.87

	Thurs, Mar 3		Watch: <i>Las Vegas Water Showdown</i> Watch: <i>San Francisco Sewer System</i>
9	Tue, Mar 8 Thurs, Mar 10	SPRING BREAK – NO CLASS	
10	Tue, Mar 15	Urban Poverty & Food Security in the City	Pijawka & Gromulat, Chapter 10, p.185 Watch: <i>History of Food Security in the US</i> Watch: <i>Food Inc.</i>
	Thurs, Mar 17		<i>Poverty Exercise</i> Calculate your monthly living expenses and compare to minimum wage living standards in North Carolina and the US. How does poverty at each of these scales threaten sustainability? (FC: G1, G2, G3) (GD: G1, G2)
11	Tue, Mar 22	Sustainable Urban Transportation	Pijawka & Gromulat, Chapter 7, p.125 Watch: <i>Bogota: Building a Sustainable City</i>
	Thurs, Mar 24		DUE: Poverty Exercise @ 12:00 noon
12	Tue, Mar 29	Urban Impacts of Climate Change	Pijawka & Gromulat, Chapter 8, p.145 <i>Sustainability Rating Systems Exercise</i>
	Thurs, Mar 31		Pijawka & Gromulat (p.251): Examine the divergent criteria & imprecise concepts incorporated into sustainability solutions and operationalized into practical programs. (FC: G1, G2, G3) (GD: G2)
13	Tue, Apr 5	Urban Resilience to Hazards and Disasters	Short & Short, Chapter 8, p.194
	Thurs, Apr 7		Watch: <i>Storm</i>
14	Tue, Apr 12	Urban Ecology	Pijawka & Gromulat, Chapter 11, p.207 Watch: <i>Seoul: The Stream of Consciousness</i> DUE: Sustainability Rating Systems Exercise @ 12:00 noon
	Thurs, Apr 14	FIELD TRIP	<i>Greenville Waste Water Treatment Facility</i>
15	Tue, Apr 19	Urban Heat Island Effect	Pijawka & Gromulat, Chapter 9, p.167 Watch: <i>Heat</i>
	Thurs, Apr 21	Course Overview	
16	Thurs, Apr 28	FINAL EXAM	Brewster D-202 @ 2:00-4:30pm

***Note:**

Foundation Goals (FC): Goal 1 (G1), Goal 2 (G2), Goal 3 (G3)

Global Diversity Goals (GD): Goal 1 (G1), Goal 2 (G2)