PUP4834 URBAN RESILIENCE AND SUSTAINABILITY POLICIES IN A GLOBAL CONTEXT (There are no pre-requisites or co-requisites for this course)

PROFESSOR

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CATALOG DESCRIPTION: Examines urban responses to the challenges of climate change from around the globe with an emphasis on local adaptation of successful techniques and approaches.

DESCRIPTION: Climate change is complicating the already difficult task of managing cities. A majority of the world’s population now lives in cities, and those cities are growing larger by the day thanks to steady migration from rural areas along with natural demographic increases. The traditional problems of managing life in urban areas – providing residents with clean water, breathable air, adequate housing, efficient transportation, and economic opportunity, among others – become even more challenging in the face of global warming, sea level rise, catastrophic weather events, and other developments associated with climate change. In this course, students will explore facets of these problems by focusing on urban resilience and sustainability policy issues drawn from a variety of cities around the globe. By examining the ways that other places are dealing with these pressing matters, students will improve their capacity to assist public-service organizations develop effective, efficient, and equitable policy responses adapted to local conditions and institutional preferences.

*This is a Discipline-specific Global Learning course that counts towards your FIU Global Learning graduation requirement.

GLOBAL LEARNING OUTCOMES:

- **Global Awareness:** Students will understand how climate change is interrelated with urban conditions locally and globally, and how cities around the world are responding with policy initiatives.
- **Global Perspective:** Students will conduct a multi-perspective analysis of urban policy problems associated with resilience and sustainability using a variety of data types and software platforms.
• **Global Engagement:** Students will create policy proposals to assist public-service organizations to address challenges of urban resilience and sustainability that cross local and global contexts.

**COURSE LEARNING OBJECTIVES:** By the end of this course, you should be able to:

• Understand how climate change affects urban conditions and how cities around the world are responding with policy initiatives.
• Apply concepts from resilience and sustainability theory and practice to urban areas affected by climate change.
• Analyze urban policy problems associated with resilience and sustainability using a variety of data types and software platforms.
• Compare and evaluate policy solutions for resilient and sustainable cities.
• Create policy proposals to assist public-service organizations address the challenges of urban resilience and sustainability.
• Communicate effectively by presenting information and policy proposals in written and oral formats.

**TEACHING METHODOLOGY**

This is a hybrid learning course in which all the instructional materials and activities are delivered through Face2Face, and Canvas and other internet-based media. Should you have any questions, please contact the professor. (As per SIU requirements-the syllabus and gradebook are found on CANVAS).

**Important Information** Before starting this course, please review the following pages:

• [Policies](#)
• [Technical Requirements and Skills](#)
• [Accessibility and Accommodation](#)
• [Academic Misconduct Statement](#)
• [Panthers Care & Counseling and Psychological Services (CAPS)](#)

**Course Prerequisites** There are no prerequisites for this course.

**Textbook and Course Materials** No textbook is required. Various open source materials used are found on Canvas.

**EXPECTATIONS OF THIS COURSE**

**Teaching Methodology**

This class will use in class discussion activities, videos, podcasts, webinars, and lecture-discussion format using the integrated platform Canvas. For each class you are expected to have read all assigned materials and be prepared to interact with your classmates and professor. All activities and assignments are designed to facilitate class discussions. We will be using the Top
Hat classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

COURSE MATERIALS:
There are many types of materials used in this course: Articles, videos, podcasts, and websites. All Articles, podcasts and Videos are free of charge and can be found on Tophat.com

MISCELLANEOUS:
Any question or comment you have should be made in class. Classmates can be very helpful in answering many questions. The question you ask is probably the same a classmate of yours have. I encourage you to use FIU e-mail to communicate with me about private issues. Because I will use e-mail to communicate with you, I expect you to review your e-mail on a regular basis. I will make every attempt to respond within 48 hours, and usually sooner. I encourage you to discuss with me any problems or concerns you may have with this class.

Visit our Writing Resources webpage for more information on professional writing and technical communication skills.

Students are expected to:

- Review the syllabus (may be subject to minor changes)
- Attend class
- Introduce yourself to the class during the first week by posting a self-introduction in the appropriate Canvas discussion forum.
- Interact with instructor(s) and peers.
- Review and follow the course calendar.
- Log in to the course 2-3 per week.
- Respond to all communication within 2 days: and
- Submit assignments by the corresponding deadline.

The instructor will:

- Hold lecture sessions and activities
- Respond to discussion boards, within 2 days.
- Respond to all communication within 2 days.
- Grade assignments within 5 days of the assignment deadline.

Communication in this course will take place via email & in-class

ASSIGNMENTS

Class Activities (35 points)- (Seven (7) at 5 points each) Concept-Mapping, Think/Pair/Share, 3-Minute paper (2) Team games, and group discussions (dates to be determined).
In classroom attendance is mandatory \textbf{(Your grade may drop 5 points after missing two (2) unexcused consecutive classes)}. Should you have any questions, please contact the professor.

Success in this course requires familiarity with the assigned reading materials. I may not cover all the assignments; however, you are responsible for all reading materials assigned. You will be responsible for extraneous materials I will cover in class. You should read all assignments \textbf{BEFORE} the class period. You are expected to participate in class discussions and group activities. Each student brings value to the class. Your experiences make the class more productive and more valuable for all.

\textit{General Guidelines for Class Discussions & Activities.}

- The purpose of the course is to learn the material, to have fun, and to talk about matters of importance with others not to get caught up in "winning" the debate.
- Some quiz questions are based on cases discussed in class.
- If you have questions, comments, or concerns over the reading material, ask them as soon as possible.
- Always support your opinions with material from our readings. When you quote, summarize, or paraphrase from the text be sure to give the page number(s) -- This is important!

\textbf{Class Discussions (20 points)- (Four (4) at 5 points each)}

As a hybrid course, every week you are not in class, you will be expected to submit a discussion post via Canvas and respond to three (3) of your classmates with thoughtful and well thought out responses based on our weekly readings.

\textbf{Paris Climate Agreement Report and Presentation Midterm (15 points)}

- \textit{Presentation (5 minutes) in class (5 points)}
- \textit{Report (10 points)}

\textit{The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at COP 21 in Paris, on 12 December 2015 and entered into force on 4 November 2016.}

\textit{Its goal is to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels.}

For this exercise students will research the merits of the Paris Climate Agreement, learn about the different perspectives from countries across the globe on the agreement, and prepare a report on the different mitigation and climate change strategies countries across the globe have implemented.

\textit{Procedures: For this exercise, students will choose one of the 196 countries who signed Paris Agreement (countries cannot be doubled) and submit a report on the country’s efforts on meeting the agreed upon statutes. Student will then create a presentation as a representative of}
the country they have chosen and give and update the class (other countries) on their climate mitigation strategies.

*This assignment will serve as an assessment of Global Awareness

Climate Outcomes Group Project Paper (10 points)

Groups of 4 will be assigned a climate change outcome/issue and will submit a paper on the issue with global examples and provide potential mitigation strategies and suggestions based on a specific location.

Topics include:
- Waste management
- Flooding
- Forest Fires
- Air pollution
- Land quality

*This assignment will serve as an assessment of Global Perspectives

ArcGIS NOAA Flood Maps Analysis (5 points)

ArcGIS NOAA Flood Maps Analysis require students to download, analyze, and present data (quantitative, spatial). Using Excel, ArcGIS, and PowerPoint (or some other presentation program), students will create mini-presentations in class to illustrate their understanding of problems related to urban resilience and climate change. Students can obtain access to ArcGIS for no charge.

Final Policy Alternatives Memo (15 points)

The final deliverable for the course is a Policy Alternatives Memo that analyzes an urban resilience and/or sustainability issue, offers feasible policy options, and proposes the best solution.

*This assignment will serve as an assessment of Global Engagement

REQUIREMENTS: Grades will be determined by a combination of individual and team performance.

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<thead>
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<th>Course Requirements</th>
<th>Number of Items</th>
<th>Points for Each</th>
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<th>Weight</th>
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### Climate Outcomes Group Project

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<tr>
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<tbody>
<tr>
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<td>5</td>
<td>25</td>
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**Total**

|               | 16 | N/A | 100 | 100% |

### GRADING SCALE:

Grades will be awarded according to the following scale:
- To get an A (94%) in the course, you will need at least 752 points.
- To get an A- (90%) in the course, you will need at least 720 points.
- To get a B+ (87%) in the course, you will need at least 691 points.
- To get a B (84%) in the course, you will need at least 672 points.
- To get a B- (80%) in the course, you will need at least 640 points.
- To get a C+ (77%) in the course, you will need at least 616 points.
- To get a C (74%) in the course, you will need at least 592 points.
- To get a C- (70%) in the course, you will need at least 568 points.
- To get a D (65%) in the course, you will need at least 520 points.
- Any total point below 480 receives an F (0%).

### READINGS: The weekly class schedule on the syllabus and on Canvas section of this syllabus contains links to PDFs and other sources used in the course that represent multiple and diverse perspectives.

Examples of course readings and videos:

WEEKLY CLASS SCHEDULE

MODULE 1

Week 1 (In-class): Introduction: Urban Resilience and Sustainability in a Global Context
Activities:
• Syllabus and Class Expectation Overview
Readings:

Assignments
• Intro Video
• Syllabus Quiz

MODULE 2

Week 2 (Online) Greenhouse Emissions and Sustainability Policies
Readings:
• HKS Case 1978 “Ambitious but Achievable: Using Transportation and Land Use Plans to Reduce GHG Emissions in California.”

Assignments:
• Discussion Submission

Week 3 (In-class): Greenhouse Emissions and Sustainability Policies
Activities Guest Presentation
• 5-Minute Paper
Reading Discussion and Activity
• Mind Map
• Lewis Climate Accord Assignment Overview

MODULE 3

Week 4 (Online): Green Construction and Urban Sustainability
Readings:
• Tom-Pierre Frappé-Sénéclauze, “Achieving Canada’s climate and housing goals through building retrofits: Recommendations on green stimulus and platform commitments,” Pembina Institute, 2020.
- HBS Case NA0056 The Green Duplex (developer analyzes the cost of greening a real estate project).

Assignments:
- Discussion Submission

**MODULE 4**

**Week 6 (In-class): Paris Climate Accord**

Activities:
- Report Presentation

Assignments
- Paris Climate Accord Report

**MODULE 5**

**Week 8 (Online): Flooding and Urban Resilience**

Readings:
- P. N. Duy; L. Chapman; M. Tight; L. V. Thong; and V. V. Linh, “Urban Resilience to Floods in Coastal Cities: Challenges and Opportunities for Ho Chi Minh City and Other Emerging Cities in Southeast Asia,” *Journal of Urban Planning and Development* 144(1) (March 2018): 1-10.
- HKS Cases 2124/2125 “A Cascade of Emergencies: Responding to Superstorm Sandy in New York City.”

Assignments
- ArcGIS NOAA Flood Maps Analysis
- Discussion Submission

**Week 7 (In Class): Flooding and Urban Resilience**

*In Class Guest Presentation*
- [Online Guest Paper]

*Reading/ Discussion and Activity*
- Gallery Walk
- Group Project Instructions and overview

**MODULE 6**

**Week 8 (Online): Urban Waste Management and Citizen Participation**

Readings:
- James Okot-Okumu, “Solid Waste Management in Uganda: Challenges and Options,” in *Future Directions of Municipal Solid Waste Management in Africa,*


Week 10 (In-Class): Urban Waste Management and Citizen Participation

*In Class Guest Presentation*
  - One-Minute Paper

*Reading Discussion and Activity*
  - Sketch noting

*Work on group project*

Week 11 (Online): Disaster Vulnerability and Urban Resilience

*Readings:*
  - HKS Case 2053.0 “Ready in Advance: The City of Tuscaloosa’s Response to the 4/27/11 Tornado.”

*Assignments*
  - Climate Outcomes Group Project Memo
  - Discussion Submission

Week 12 March 30: Disaster Vulnerability and Urban Resilience

*Tour of the Wall of Wind*
  - One page reflection

*Final Project discussion and instructions*

MODULE 7

Week 17 (Online): Smart Cities and Sustainability

*Readings:*
  - HKS Case 2113.0 “Choosing the Road Less Traveled: How Cycling Took Hold in Copenhagen.”

*Assignment:*
  - Discussion Submission
Week 14 (In-Class): Smart Cities and Sustainability
In Class Guest Presentation and Demonstration
Work on final policy

MODULE 8

Week 15 (Online): Final Policy Exercise