# **SOS 111/PUP 190: Sustainable Cities**

Class Number:
Credit Hours: 3
Semester & Year (Start Date - End Date)
Prerequisite: None
Instructor(s) - Names and Contact Information
Name:
Office:
Office Hours:
Use the Canvas Inbox for all email communication. See Course Communication Policy below.
Teaching Assistant (TA) - Names and Contact Information
Name:
Office:
Office Hours:
Use the Canvas Inbox for all email communication. See Course Communication Policy below.

#### **Course Textbook and Materials**

#### **Required Textbook**

Hagen, B. & Pijawka, K. D. (2020). Sustainability for the 21st Century: Pathways, programs, and policies (3rd. ed). Kendall Hunt.

ISBN: 978-1-5249-8941-5

Purchase/Download Options:

- Purchase hard copy from ASU Bookstore
- Rent ebook from Kendall Hunt Publishing Company (180 day rental Instructions will be provided on how and where to access the ebook.)

#### Respondus LockDown Browser + Monitor

This course uses Respondus LockDown Browser + Monitor for quizzes and/or exams.

## **Catalog Description**

Introduces technological, social, and cultural principles and innovations for cities under the notion of sustainability and sustainable development within the global, regional, and local contexts.

### **Course Description**

This undergraduate course introduces the role of cities as they relate to global to local sustainability concepts and challenges. The course provides an urban perspective on environmental, socio-economic, and infrastructural sustainability problems and their consequences on natural systems and built communities.

Cities have a major role to play in achieving global sustainability as well as equal opportunity and fairness for its population. The course presents cities as complex and interconnected organisms that impact natural and socio-economic systems alike across temporal and spatial scales. By taking this course, students gain a better understanding of how cities can be a culprit, but also a major part of the solution to today's sustainability challenges. Students take an active role in assessing the sustainability of cities, identifying shortcomings or future needs, and communicating potential solutions.

## **Program Level Learning Outcomes (PLLO)**

This course provides an introduction to many of the PLLOs at the School of Sustainability.

**Core Sustainability Competencies** 

# **Course Outcomes (CO)**

The Course Outcomes define the main knowledge and skills students will gain in this course. Each CO is aligned to one or more of the PLLOs.

- CO 1: Explain the role of cities within global sustainability challenges. (PLLO: A1, 2, 4; B3, 4; C2, 6; D3)
- CO 2: Define key sustainability concepts and summarize the history of global urbanization and sustainability. (PLLO: A 1, 2; B1, 2; C1, 2; D1)
- CO 3: Explain environmental and social justice issues in cities. (PLLO: A1, 2; B3; C1, 2)
- CO 4: Describe urban sustainable development strategies and policies. (PLLO: A1, 2; B4; C2, D2, 3, 4; E1,2)
- CO 5: Identify urban vulnerabilities shortcomings, and potential solutions. (PLLO: A1, 2, 4; B1, 4; C6, D2, 3)
- CO 6: Explain the role of cities within the Water-Energy-Food Nexus. (PLLO: A1, 25; B1, 3, 4; D3)
- CO 7: Connect local sustainability and individual behavior to global issues. (PLLO A1, 4; B2, 5; C1, 3; E1)

### **Course Schedule** (subject to change: see syllabus disclaimer)

The Topics and Objectives define the main goals for each module of this course. Each Objective is aligned to one or more of the COs.

Module Topics and Objectives	Assignments
Course Information	<ul> <li>Group Discussion: Introductions</li> <li>Course Readiness Confirmation</li> <li>Student Honor Code</li> </ul>
Module 1: Introduction to Global Challenges in Sustainability 1.1: Identify global challenges to sustainability and sustainable development. (CO: 1, 5, 6, 7) 1.2: Explain the role of cities in causing and responding to global challenges. (CO: 1, 2, 6) 1.3: Articulate key concepts in sustainability and sustainable development. (CO: 2, 3) 1.4: Describe main goals/indicators, and key components of urban sustainable development. (CO: 4, 5)	<ul> <li>Module 1 Discussion: Ecological Footprint (Reflection)</li> <li>Module 1 Discussion: SDGs (City Project)</li> <li>Module 1 Quiz</li> </ul>
Module 2: The History of Cities and Environmentalism 2.1: Trace the general history of the development of cities. (CO: 2)	Module 2 Discussion: Conservation vs. Preservation Debate (Reflection)

2.2: Describe the relationship between the growth of cities and the evolution of environmentalism. (CO: 2, 3) 2.3: Describe how social and cultural norms can influence the growth of cities.(CO: 2, 3) 2.4: Explain how environmentalism as well as environmental and social justice relate to sustainability. (CO: 3, 7)	<ul> <li>Module 2 Discussion: Significant Events Timeline (City Project)</li> <li>Module 2 Quiz</li> <li>Micro Essay: Environmental Justice and Sustainability</li> </ul>
Module 3: Climate Change and Urban Resiliency Planning 3.1: Define key concepts in the context of climate change and resiliency planning. (CO: 1, 2) 3.2: Summarize climate vulnerabilities and threats. (CO: 1, 5) 3.3: Explain the role of cities in terms of climate change risks and potential solutions. (CO: 4, 5) 3.4: Explain barriers to climate change policy development and implementation. (CO: 5, 7)	<ul> <li>Module 3 Discussion: Greenhouse Gas Emissions (Reflection)</li> <li>Module 3 Discussion: Climate Action Preparedness (City Project)</li> <li>Module 3 Quiz</li> </ul>
Module 4: Sustainable Urbanism 4.1: Describe sustainable urbanism. (CO: 2, 4) 4.2: Explain planning and design solutions for urban sustainability problems. (CO: 4, 5) 4.3: Differentiate effects of sustainable urbanism strategies at the neighborhood level. (CO: 4) 4.4: Explain the social dimensions of sustainable neighborhood design. (CO: 4, 7)	<ul> <li>Module 4 Discussion: Urban Sustainability Challenges (Reflection)</li> <li>Module 4 Discussion: Sustainable Urbanism (City Project)</li> <li>Module 4 Quiz</li> <li>Micro Essay: From City to Neighborhood</li> </ul>
Module 5: Water, Energy, Food, and Urban Climate 5.1: Explain sustainable agricultural systems for cities. (CO: 2, 6, 7) 5.2: Describe how sustainable water management practices on different spatial scales relate to cities. (CO: 3, 4, 6) 5.3: Describe energy landscapes. (CO: 6) 5.4: Explain responses to urban climate challenges. (CO: 4, 6, 7)	<ul> <li>Module 5 Discussion: Urban Climate (Reflection)</li> <li>Module 5 Discussion: Food, Water, Energy (City Project)</li> <li>Module 5 Quiz</li> <li>Envisioning the Sustainable City: Outline</li> </ul>
Module 6: Urban Ecology and Green Infrastructure 6.1: Describe long term impacts from interaction between people and nature in cities. (CO: 2, 7) 6.2: Differentiate goals, scales, and impacts of green networks. (CO: 1, 2, 4) 6.3: Explain Urban Ecology and Urban Ecosystem Services. (CO: 2, 4) 6.4: Explain how biophilia and ecological design can influence the development of cities. (CO: 2, 4, 7)	<ul> <li>Module 6 Discussion: Urban Fabric (City Project)</li> <li>Module 6 Quiz</li> <li>Envisioning the Sustainable City</li> </ul>
Module 7: Sustainable Governance 7.1: Summarize sustainable urban governance and policy. (CO: 1, 2, 4) 7.2: Explain public engagement and participatory governance. (CO: 5, 7)	<ul> <li>Module 7 Discussion: Values, Culture, and Sustainability (Reflection)</li> <li>Module 7 Discussion: Policy Communication and Public Participation (City Project)</li> <li>Module 7 Quiz</li> </ul>

7.3: Explain the implications of public risk perception and communication on sustainable	
urban policy and governance. (CO: 4, 5)	
7.4: Articulate the role of culture in achieving sustainable cities. (CO: 3, 4, 5)	

### **Assessment Weights**

Assessment	% of Final Grade
Discussions (Reflection)	20%
Discussions (City Project)	30%
Quizzes	15%
Micro Essays	10%
Final Paper: Outline	5%
Final Paper	20%
Extra Credit *Optional	5%
TOTAL	105%

### **Assessment Activities**

#### **Group Discussions**

Weekly group discussions are a significant part of this course. You will be required to submit a video recording for your initial response to each discussion prompt. Your follow-up discussion with your group members may be typed or recorded. Your initial response to each discussion is due on Day 4 of the module, and your replies to at least two peers for each discussion are due by Day 7 of the module. Specific due dates are found on the course <a href="Home Page">Home Page</a>.

You will be randomly assigned to a group of 18 - 20 students, and each group will be randomly assigned a city in North America. Each week, your group will engage in two online discussions:

#### Reflection (20%)

In these discussions, you will respond to one or more of the course resources and discuss your personal interpretation and understanding.

#### City Project (30%)

In these discussions, your group will research and discuss specific aspects of your assigned city and how the module's topics and concepts might apply there.

Note: All deliverables will be individually graded - there are no graded group projects. You will be evaluated on your participation and contributions to the group discussions.

#### **Quizzes (15%)**

Each module contains a quiz over the readings and viewings.

#### Micro Essays (10%)

There are two short writing assignments in which you respond to and expand upon your group discussions and activities.

#### **Final Paper**

#### Outline (5%)

The Outline will help you organize and prepare for your Final Paper.

### Final Draft (20%)

You draw together major concepts from the course in your Final Paper.

### **Grading Scale**

This course will be graded on an A-E plus/minus scale.

%	Grade
97 to 100%	A+
93 to < 97%	A
90 to < 93%	A-
87 to < 90%	B+
83 to < 87%	В
80 to < 83%	B-
77 to < 80%	C+
70 to < 77%	С
60 to < 70%	D
Below 60%	E
-	EN - Failing for Not Participating
-	EU - Failing for Incomplete or Partial Participation
-	XE - Academic Dishonesty

### **Submitting Assignments**

All time frames used in class follow Arizona Mountain Standard Time (MST). Arizona does not observe daylight saving time (DST) from March through November; therefore, the time in Arizona will not align with other places that are on MST for half the year. Use a <u>Time Converter</u> to ensure you account for the difference in Time Zones. If you are located in time zone other than Arizona MST, go to your account on the Global Canvas Navigation bar (black background) and edit your settings to reflect your actual time zone. This will adjust the due dates and times in your courses (here is <u>more information</u> about this).

All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas. Do not submit an assignment via email (unless asked to do so).

### **Late or Missed Assignments Policy**

Notify the instructor **BEFORE** an assignment is due if an urgent situation arises and the assignment will not be submitted on time. Published assignment due dates (Arizona Mountain Standard time) are firm. Please follow the appropriate University policies to request an <u>accommodation for religious practices</u> or to accommodate a missed assignment <u>due to University-sanctioned activities.</u>

Unexcused late assignments are accepted for a limited time and penalized by 10% for every day late. Assignments being submitted 4 days after the due date or later will not be graded and will receive 0 points.

### **Attendance and Absences**

Please follow the appropriate university policies to request absences or accommodations related to <u>ACD 304–04 Accommodation for Religious Practices</u> and <u>ACD 304–02 Missed Classes Due to University-Sanctioned Activities</u>.

## **Course Delivery and Access**

Students will participate in this course through Canvas. Course content will be delivered in Canvas through readings, videos, quizzes, discussions, and writing assignments. Course content and assignments will be accessed online in Canvas, which can be accessed through <a href="mailto:my.asu.edu">my.asu.edu</a>.

### **Computer Requirements**

This course requires a computer with Internet access and the following:

- Web browsers (Chrome, Internet Explorer, Mozilla Firefox, or Safari)
- Adobe Acrobat Reader (free)
- Adobe Flash Player (free)
- A webcam, microphone, headset/earbuds, and speaker
- Microsoft Office (Microsoft 365 is free for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream video

Note: A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in online courses. While you will be able to access course content with mobile devices, you must use a computer for some assessments.

See <u>Technology and time</u>; <u>Important factors for ASU Online students</u> for additional information.

### **Community of Care**

The health of the Sun Devil community is a top priority. This situation has raised many questions. If you have an issue that is not addressed here, please call 1-855-278-5080 or use the live-chat option at uto.asu.edu/ExperienceCenter/chat

Review the ASU statement about face covering from 6/12/20:

"Effective immediately at Arizona State University, face coverings will be required for all employees, students and visitors while in buildings. Face coverings will also be required in outdoor community spaces where social distancing isn't possible. Examples of outdoor community spaces include garages and parking lots, ASU shuttles, bicycle racks and sidewalks."

- Community of Care Refresher
- Live well, be well

### **Course Communication Policy**

#### Three Before Me

This course uses a "three-before-me" policy regarding student/instructor communications. When course-related questions arise, please check these three sources for an answer before emailing the instructor with your question:

- 1. Course Syllabus
- 2. Canvas Announcements
- 3. Community Forum: This is a discussion forum in Canvas used for general questions about the course. You are encouraged to respond to your classmates' questions and comments.

#### **Canvas Inbox**

All student/instructor communication will be directed through the Canvas Inbox. This ensures the security, privacy, and record of the communication. Note: You must have your primary Canvas email address set as your asurite@asu.edu, not firstname.lastname@asu.edu or a personal email account.

#### **Course Evaluations**

Students are expected to complete the course evaluation. Feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available and students can access it through myASU as well. See <a href="Student FAQs">Student FAQs</a> for more information.

### Syllabus Disclaimer

All syllabi are subject to minor changes to meet the needs of the instructor, school, or class. Every effort will be made to avoid changing the course schedule, but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes. Please check your ASU email and the Announcements on the course site often.

For more information, see School Policies on the Course Home Page.

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