

GEOG 302: Sustainable Development
Spring 2019

Harvill, 210

9:30am-10:45 T&Th

Instructor: Professor Andrea K. Gerlak
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Office Hours: Tuesdays, 1pm-3pm, and by appointment

ALL COURSE READINGS,
ASSIGNMENTS, AND SYLLABUS
UPDATES WILL BE POSTED TO
THE D2L SITE.

Website: <https://d2l.arizona.edu/d2l/home/756670>

"Just sustainability is more accurately described as just sustainabilities because the singular form suggests there is one prescription for sustainability that can be universalized. The plural however acknowledges the relative, place and culturally bound nature of the concept. Just sustainabilities is the integration of social/spatial justice and sustainability..."

Julian Agyeman, Tufts University
<http://sites.tufts.edu/julianagyeman/>

Course Description

The term "sustainable" is now used -- and abused -- to such an extent that it has lost much of its meaning. However, there are real and concrete policy and programmatic consequences in the understanding and employment of "sustainable development." How sustainability is defined and achieved is a contentious topic and is open to a variety of interpretations and definitions. Flowing from the term are conflicts and synergies between economy, equity, and environment as well as the interests of the present and future generations. The 1987 Brundtland Commission defined it as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs." Today, policymakers, planners and development practitioners aim to balance what are termed as the "3 Es": environmental stewardship, social equity, and economic growth. There is considerable disagreement amongst decision-makers and stakeholders on how these three areas should be pursued and prioritized.

In this course, we will examine the idea of sustainable development from multiple viewpoints, and gain a better understanding of the policies, strategies, and interventions that seek to balance the environment, economy, and equity. We will explore how different ideas of sustainability may be mobilized to help imagine and enact new socio-ecological futures. While "sustainability" is typically understood through the lens of environmental protection, natural resource consumption, and economic development, this class will focus on expanding our perspectives of sustainability to include what Julian Agyeman refers to as "just sustainabilities" – how race, class, gender, and geography both effect and are effected

by sustainability practices. Through readings, discussions, video and audio, and speakers, we will explore the potentials and challenges of sustainable development.

Course Objectives

This course offers an introduction to sustainable development and how it has been debated and implemented over time. In the process, it is intended to help you read more critically, write more effectively, and to reflect on your own environmental concerns and values.

During this course, you will:

- Discuss the theories of sustainable development and sustainability, as well as its critiques
- Define and articulate the concept of “just sustainabilities”
- Interrogate the pitfalls of sustainable development, particularly as they matter to issues of social justice
- Explore major challenges to sustainable development and proposed strategies for solutions as they relate to issues such as energy, water, food, and transportation
- Develop your own ideas, values, and opinions on appropriate pathways for sustainable development

Expected Learning Outcomes

After participating in this course, you will be able to:

- Assess the ecological, economic, and social sustainability of urban areas
- Effectively communicate verbally and in writing to diverse audiences, publics, and stakeholders
- Apply knowledge of urban and regional development collaboratively

Course Format

There are three weekly class sessions. Participation and attendance are required. These sessions will include a combination of lectures, class discussions, writing assignments and exercises completed outside of class. We will bring in some guest speakers from across campus in order to provide a window into the range of expertise and perspectives on issues of sustainability at UA and in our larger Tucson community. Students taking this class will be expected to actively participate in class, and through assignments and activities.

Course Materials

There is no required textbook for this course. All required reading and/or visual media will be posted on the course D2L site at least one week in advance of the class meeting for which they are assigned. Students are expected to complete the required reading in

preparation for the class meeting. Some assignments may require extra readings (such as journal articles, books or news stories) to be completed.

Course Assignments, Attendance, and Grading

The course grade will be based on attendance and in-class exercises, & short assignments, a mid-term and final exam, and a group City and Sustainability project. The midterm and final exam will cover material from the readings, lectures, and other audiovisual sources.

Participating in the course and attending class sessions and other course events are vital to the learning process. As such, attendance is required at all lectures and discussion section meetings. Absences may affect a student's final course grade. If you anticipate being absent, are unexpectedly absent, or are unable to participate in class online activities, please contact me as soon as possible. To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or drc-info@email.arizona.edu. If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057.

You are expected to complete assignments on time. Late assignments will be penalized 10% for each day they are late.

Grading Summary

Participation and in-class exercises	15 points
Short assignments	25 points
Mid-term exam	15 points
Group city and sustainability project	30 points
Final exam	15 points
Total	100 points 100%

Extra Credit

- Attend up to 2 pre-approved public lectures or events and write one-page summary and reaction paper
 - 1 point each for possible 2% increase in your grade
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Assignments will not be graded on a “curve.” Verbal participation in discussions as well as in lecture also plays a part in your final grade. Submitted assignments are expected to represent the highest possible level of scholarship; neatness, accuracy and academic integrity will be considered when assigning grades. Course grades will be assigned on the student’s proportion of total points based on the standard percentages: 90+ (A), 80-89 (B), 70-79 (C), 60-69 (D), and below 60 (E) grading scale.

Short Assignments	Due dates
Mind mapping: How do you want to live? activity (3 pts)	Thursday, January 17 th
Response to Urbanization film (5 pts)	Thursday, February 7 th
Response to Levee film (7 pts)	Thursday, February 21 st
Response to Can You Dig This? film (5 pts)	Thursday, March 21 st
ENR2 Tour response (5 pts)	Tuesday, April 9 th

Course Policies

Electronic equipment in class (Laptops, phones etc.): Students who inappropriately use laptops and phones in the classroom distract other students and disadvantage their own ability to learn. You may use a laptop only to take notes in class. Cell phones should be put on silent.

Academic Integrity: Students are encouraged to share their views and discuss course material with each other. Study groups for exams are often helpful. But all graded work must be done independently (unless otherwise specified) and you are expected to adhere to the UA Code of Academic Integrity (<http://dos.web.arizona.edu/uapolicies/cai2.html>).

This Code prohibits all forms of academic dishonesty, including, but not limited to:

- Cheating, fabrication, facilitating academic dishonesty, and plagiarism as set out and defined in the Student Code of Conduct, ABOR Policy 5-308-E.6, E.10, and F.1
- Submitting an item of academic work that has previously been submitted or simultaneously submitted without fair citation of the original work or authorization by the faculty member supervising the work
- Violating required disciplinary and professional ethics rules contained or referenced in the student handbooks (hardcopy or online) of undergraduate or graduate programs, or professional colleges
- Assisting or attempting to assist another to violate this Code

Accessibility and Accommodations: At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <https://drc.arizona.edu/>) to establish reasonable accommodations.

Threatening behavior: Threatening behavior is prohibited in the classroom and will be reported. “Threatening behavior” is defined by UA to mean any statement, communication, conduct or gesture, including those in written form, directed toward any member of the

University community that causes a reasonable apprehension of physical harm to a person or property. A student can be guilty of threatening behavior even if the person who is the object of the threat does not observe or receive it, so long as a reasonable person would interpret the maker’s statement, communication, conduct or gesture as a serious expression of intent to physically harm. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>

The University is committed to creating and maintaining an environment free of discrimination. See <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

NOTE: All information in this syllabus may be subject to change at the discretion of the instructor.

DETAILED COURSE SCHEDULE AND READINGS (SUBJECT TO CHANGE)

Date	Topic	Readings (and resources)
Thurs, Jan 10 th	Introduction to the course	
Tues, Jan 15 th	Sustainability and environmental learning	<ul style="list-style-type: none"> ○ Thomashow (2015), Environmental Learning in the Anthropocene, Parts I and II
Thurs, Jan 17 th	The origins of sustainable development	<ul style="list-style-type: none"> ○ Wheeler et al. (1987), Bruntland selection ○ Wheeler et al. (1992) Rio selection ○ UN, SDGs at http://www.un.org/sustainabledevelopment/sustainable-development-goals/
Tues, Jan 22 nd	Development and economics	<ul style="list-style-type: none"> ○ Hawken (1997), Natural Capitalism ○ Hickel and Kirk (2017), Don’t be Scared about the End of Capitalism – Be excited to build what comes next ○ Cramer (2017), The Raw Materials Transition in the Amsterdam Metropolitan Area: Added Value for the Economy, Well-Being, and the Environment
Thurs, Jan 24 th	Defining and mapping sustainable development	<ul style="list-style-type: none"> ○ Krueger and Agyeman (2005), Sustainability schizophrenia or “actually existing sustainabilities?” toward a broader understanding of the politics and promise of local sustainability in the US ○ Hopwood et al. (2005), Sustainable development: Mapping different approaches
Tues, Jan 29 th	Urbanization and sustainability	<ul style="list-style-type: none"> ○ US Cities Factsheet (2018) ○ Rockefeller Foundation, 100 Resilient Cities at http://www.100resilientcities.org/ ○ Next City, Top Stories at https://nextcity.org/
Thurs Jan 31 st	Introduction to group city and sustainability project and in-class work	

Tues, Jan 5 th	Film: <i>Urbanized</i>	
Thurs, Feb 7 th	Cities and sustainable development: Sustainable Tucson	<ul style="list-style-type: none"> ○ Jacobs (1993), The Death and Life of Great American Cities ○ Davis (2017), 'Sustainable Tucson' is a long way off, new study shows ○ City of Tucson, Plan Tucson 2013
Tues, Feb 12 th	Just sustainabilities	<ul style="list-style-type: none"> ○ Agyeman (2013), Introducing Just Sustainabilities ○ Bullard (2017), Will Houston's post-Harvey Recovery Exacerbate Inequities or build a More Just City? ○ Petronzio (2012), Google maps: Story of Income Inequality
Thurs, Feb 14 th	Group city and sustainability project in-class work	
Tues, Feb 19 th	Case study: Hurricane Katrina	<ul style="list-style-type: none"> ○ Robertson and Fausett, 10 years after Katrina ○ Newkirk (2017), Puerto Rico's Environmental Catastrophe
Thurs, Feb 21 st	Film: <i>When the Levees Broke, Acts I and II</i>	
Tues, Feb 26 th	Midterm review	
Thurs, Feb 28 th	Midterm exam	
Mar 4 th – 8 th	SPRING BREAK	
Tues, Mar 12 th	Hand back and discuss exam Group city and sustainability project in-class work	
Thurs, Mar 14 th	Water and cities: Insecurity and injustice	<ul style="list-style-type: none"> ○ Weiser (2017), How Las Vegas Aims to be the next Silicon Valley for Water Innovation ○ Los Angeles river Restoration at http://lariver.org ○ Walton (2017), Philadelphia Water Rate Links Payments to Household Income
Tues, Mar 19 th	Film: <i>Can you dig this?</i>	
Thurs, Mar 21 st	Green architecture and design Dr. Adriana Zuniga-Teran, CAPLA	<ul style="list-style-type: none"> ○ US Green Building Council, LEED certification at https://new.usgbc.org/leed ○ National Geographic (2017), How Green Buildings Could Save Our Cities ○ Kolczak (2017), Top 10 Green Buildings of 2017 ○ Inhabitat, Sustainable building materials at https://inhabitat.com/tag/sustainable-building-materials/
Tues, Mar 26 th	Food justice and local food Dr. Christina Greene, CLIMAS	<ul style="list-style-type: none"> ○ Agyeman (2013), Food ○ A Conversation with Gary Paul Nabhan (2016), Tucson as a UNESCO City of Gastronomy

Thurs, Mar 28 th	Transportation and cities Dr. David Plane, SGD	<ul style="list-style-type: none"> ○ Shelters (2013), Tucson Bus Riders Union ○ Houston et al. (2015), Can compact rail transit corridors transform the automobile city? Planning for more sustainable travel in Los Angeles ○ Sperling (2014), An Innovative Path to Sustainable Transportation
Tues, Apr 2 nd	Green infrastructure and cities	<ul style="list-style-type: none"> ○ PAG (2015), Green infrastructure for regional vibrancy ○ Los Angeles Times (2010), The Dry Garden: Elmer Avenue becomes Green Street, a water-wise and solar-lighted community effort ○ Kutz (2018), Extreme heat hits Tucson's poor neighborhoods hardest
Thurs, Apr 4 th	AAG meeting in Washington, DC	<ul style="list-style-type: none"> ○ Tour of ENR2
Tues, Apr 9 th	Energy and just sustainabilities	<ul style="list-style-type: none"> ○ Pahl (2010), Energy and our communities ○ The Climate Reality Project (2016), Follow the Leader: How 11 countries are shifting to renewable energy ○ Enzinna (2017), "I Didn't Come Here to Lose": How a Movement Was Born at Standing Rock
Thurs, Apr 11 th	Tucson and TCE Denise Moreno Ramirez, SWES	<ul style="list-style-type: none"> ○ Davis (2017), South-side Tucsonans mobilize for another water-pollution struggle ○ Schreiber (2017) Public looks for link between diseases and south side contamination ○ Papat (2017), Tucson Water: Old treatment plant on south side now unnecessary ○ US EPA, Superfund: CERCLA Overview at https://www.epa.gov/superfund/superfund-cercla-overview
Tues, Apr 16 th	Group city and sustainability project in-class work	
Thurs, Apr 18 th	Group presentations	
Tues, Apr 23 rd	Group presentations	
Thurs, Apr 25 th	Group presentations	
Tues, Apr 30 th	Review for final exam and class wrap-up	
Tues, May 7 th	Final exam, 8:00 to 10:00am	