# UNIVERSITY OF CALIFORNIA, SANTA CRUZ ENVIRONMENTAL STUDIES DEPARTMENT ENVS 145: PLANNING GREEN CITIES SUMMER 2024

Instructor:	Dr. Charles Rivasplata
Zoom Link:	sjsu.zoom.us/j/81432317931?pwd=hHm1HkPTK4Q6tX3gfz90CVa1oLibbb.1
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Office hours:	Tuesdays, 8:00-9:00 a.m. by appointment (beginning July 2)
Class time:	Tuesdays and Thursdays, 9:00 a.m12:00 p.m.
Classroom:	On-line
Prerequisites:	Previous/concurrent enrollment in ENVS 100 and ENVS 101L, or instructor consent
Units:	5

#### **Course Catalog Description**

**ENVS 145**: Are cities an environmental savior or an engine of pollution? This course considers what makes a truly green city and analyzes innovative urban policies in areas such as energy, transportation, buildings, and waste management.

## **Course Description and Course Learning Objectives:**

This course is intended to provide students with a strong grounding in the theoretical paradigm of sustainability and green cities, understanding the relationships between human civilization, economic growth, "nature" and the environment. Next, the course will focus on evaluating sustainability principles in action, analyzing how cities and regions across the world have taken actions to embed sustainability principles, policies, and actions into land use planning. A key objective will be to establish the philosophical and ethical tenants of sustainability within each student's understanding and approach to urban planning with an ability to translate abstract principles driving sustainability into everyday land use planning actions.

Upon successful completion of the course, students will ideally:

1) Describe and explain the philosophical foundations underlying modern western society with respect to how we view "the environment" and its relationship with our society and economy.

2) Describe and explain how environmental limits and social inequities frame our approach to sustainability.

3) Describe and explain the core tenants of sustainability in a concise manner, interweaving the three "E"s that guide sustainability –environment, economy, and equity.

4) Describe and explain the modern origins of land use planning and how the regulatory approach of addressing the externalities of land development can serve to implement sustainability objectives.

5) Apply and critique sustainability planning tools such as sustainability indicators, ecological footprint analysis, and green building certification.

6) Identify subject areas related to urban sustainability such as land use, urban design, transportation, environmental planning, resource use, environmental justice, local economic development, and architecture and building construction practices, and explain how these individual topics fit together.

7) Describe and explain natural resource and pollution control factors in planning, as well as how to create sustainable futures.

8) Describe and explain urban sustainable development practices used in cities and regions across the world.

9) Describe and explain interactions, flows of persons and goods, cultures, and differing approaches to urban sustainability planning across world regions.

10) Describe and explain how to effectively communicate sustainability principles to the public and elected officials to inspire action.

#### **Required Course Texts**

As indicated in the Course Schedule at the end of this syllabus, all course readings are available online or on Canvas; and TED Talks are available online. Please consult the Course Schedule.

#### **Course Assignments and Grading Policy**

Your grade for the course will be based on the following assignments and other class activities:

Assignments and Graded Activities	Due Date(s)	Perc. of Course Grade
Reading Memos (3)	Jul. 2, 11, 18	15
Class Participation	Ongoing	15
Assignment 1 (Individual)	Jul. 9	20
Assignment 2 (Group)	Jul. 25*	25
Final Exam	Jul. 26-27	25

\* On July 25, group reports are due at 3:00 p.m. and presentations will be given in class.

This class meets over five weeks in summer. As such, each student should make every effort to be in class on a regular basis. If you are sick or have an unavoidable conflict, please notify me in advance by email. All students in the class will be expected to have read the required readings (listed in the Course Schedule) before the start of each class and be ready to discuss the key questions and issues raised. Class discussion is an important component of ENVS 145 and thus, reading and participation in class constitute a significant component of the course grade.

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#### Sustainability in Action – Two Part Evaluation

One of your principal class assignments will be a two-part evaluation of sustainability principals in action through the lens of a selected community to study. In these two assignments, described below and on the next page, you will evaluate the principals of sustainability planning by examining the following:

(a) the characteristics of the community, including its ecological footprint and socio-economic characteristics; and current planning documents adopted by the municipality to address long term sustainability in the community with respect to resource needs, environmental constraints, and socio-economic characteristics, and

(b) a specific set of policies (a sustainability plan or sustainability element of the General Plan) to improve the city's sustainability and resilience.

The course workload will be based on the following activities (in-depth descriptions on Canvas):

• Reading Memos

Students will submit a one-page summary/reaction memo for <u>one</u> of the assigned readings by 12:00 p.m. (noon) on each of the following class dates: July 2, July 11, and July 18. <u>Maximum: 15 points (5 points per memo)</u>

#### • Class Participation

Students will participate in class discussions and provide a one-minute reflection summary of a topic covered in the class readings. Check the Student Reflection Schedule on Canvas ("Student Reflection" folder, "Files" section) for your assigned date. <u>Maximum: 15 points</u>.

#### • Assignment 1: Community Summary and Sustainability Planning (4 pp. max.)

<u>This assignment, due Tue., July 9 at 9:00 a.m.</u>, will provide background information on the city assigned by the instructor. It will provide (a) a summary of community characteristics (location, size, demographics, economic activity); (b) an initial evaluation of the community's environmental "footprint" and (c) an inventory of current sustainability-related planning policies found in the community's planning documents (General Plan, Zoning Code, Sustainability and Climate Action Plans). <u>Maximum: 20 points.</u>

#### • Assignment 2: Sustainability Policy / Proposal (Group Paper & Presentation)

Based on the research and background information acquired from the first assignment, each group will work together to draft a set of policies that address sustainability needs in the assigned community. Each group member will be expected to cover a specific area of work. This assignment, due Thu., July 25, will include both a written report (due at 3:00 p.m.), and a 10-minute, in-class group presentation on the same day. Maximum: 25 points.

• Final Exam (Take-Home) No Class The exam will cover class readings, videos and slides. It will be e-mailed on Fri., July 26 at 4:00 p.m., and will be due back to the instructor (via e-mail <u>and</u> posted on Canvas) on Sat., July 27 at 4:00 p.m. <u>Maximum: 25 points</u>.

#### Calculation of Final Course Letter Grade

As indicated in the table above, the final course grade, which incorporates six graded activities, adds up to 100 quarter points. The first two activities in the table (the reading memos and class

University of California, Santa Cruz Environmental Studies Department participation) are collectively worth 30 points (or 30 percent of the grade), the first assignment is worth 20 points (20 percent), the second (group) assignment is worth 25 points (25 percent), and the final exam is worth 25 points (25 percent).

At the end of the quarter, the following grading scheme will be used to translate each student's total numeric score into a final grade for the course:

A+ (98 to 100); A (93 to 98); A- (90 to 93); B+ (87 to 90); B (83 to 87); B- (80 to 83); C+ (77 to 80); C (73 to 77); C- (70 to 73); D+ (67 to 70); D (63 to 67); D- (60 to 63); F (below 60).

#### **Other Grading and Assignment Issues**

All classwork received late will be marked down accordingly.

<u>Reading Memos (3)</u>: If received within the first 24 hours after the scheduled 12:00 noon deadline, they will be marked down 0.3 point. Thereafter, it will be marked down according to the following schedule:

1-4 days late: 0.5 point

4-7 days late: 1.0 point

Over 7 days: no credit given

<u>Assignments 1 and 2</u>: If received within 24 hours of the deadline (see above), it will be marked down 1 point. Thereafter, it will be marked down according to the following schedule:

1-4 days late: 2 points

Over 4 days late: no credit given

<u>Final Exam</u>: If received within 24 hours of the 4:00 p.m. deadline on July 29, it will be marked down 2.5 points. Thereafter, it will be marked down according to the following schedule:

1-3 days late: 5 points Over 3 days late: no credit given

## **Classroom Protocol**

Students are expected to arrive on time to class, be courteous to other students and the instructor and refrain from using a cell phone, texting and the internet in class, except as permitted by the instructor. If you need to be absent, please notify the instructor at your earliest convenience. We recognize that illness, personal emergencies and other legitimate conflicts may occur, however please remember that each class meeting represents a substantial fraction of the total course. Be sure to check with the instructor regarding any materials or information given out at the session you were absent from, and if possible, obtain class notes from a classmate.

#### Academic Integrity Statement, Plagiarism, and Citing Sources Properly

Academic integrity is the cornerstone of a university education. Academic dishonesty diminishes the university as an institution and all members of the university community. It tarnishes the value of a UCSC degree.

All members of the UCSC community have an explicit responsibility to foster an environment of trust, honesty, fairness, respect, and responsibility. All members of the university community are expected to present as their original work only that which is truly their own. All members of the community are expected to report observed instances of cheating, plagiarism, and other forms of academic dishonesty in order to ensure that the integrity of scholarship is valued and preserved at UCSC.

In the event a student is found in violation of the UCSC Academic Integrity policy, he or she may face both academic sanctions imposed by the instructor of record and disciplinary sanctions imposed either by the provost of his or her college or the Academic Tribunal convened to hear the case. Violations of the Academic Integrity policy can result in dismissal from the university and a permanent notation on a student's transcript.

Plagiarism is the use of someone else's language, images, data, or ideas without proper attribution. It is a very serious offense both in the university and in your professional work. In essence, plagiarism is both theft and lying: you have stolen someone else's ideas, and then lied by implying that they are your own.

Learning when to cite a source (and when not to) is an art, not a science. However, here are some common examples of plagiarism that you should be careful to avoid:

- Using a sentence (or even a part of a sentence) that someone else wrote without identifying the language as a quote by putting the text in quote marks and referencing the source.
- Paraphrasing somebody else's theory or idea without referencing the source.
- Using a picture or table from a webpage or book without reference the source.
- Using data some other person or organization has collected without referencing the source.

The University of Indiana has developed a very helpful website with concrete examples about proper paraphrasing and quotation. In particular, review the following pages:

- Overview of plagiarism at <u>www.indiana.edu/~istd/overview.html</u>
- Examples of plagiarism at <u>www.indiana.edu/~istd/examples.html</u>
- Plagiarism quiz at <u>www.indiana.edu/~istd/test.html</u>

If you still have questions, feel free to talk to the instructors personally. There is nothing wrong with asking for help, whereas even unintentional plagiarism is a serious offense.

#### Citation style

It is important to properly cite any references you use in your assignments. The instructor suggests using Kate Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations*, Eighth Edition (University of Chicago Press, 2013, ISBN: 978-0226816388). Copies are available in the UCSC Library. Additionally, the book is relatively inexpensive, and you may wish to purchase a copy. Please note that Turabian's book describes two systems for referencing materials: (1) "notes" (footnotes or endnotes), plus a corresponding bibliography, and (2) in-text parenthetical references, plus a corresponding reference list. In this class, students should use the second system, i.e., in-text parenthetical references.

# Accommodation for Disabilities

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building is evacuated, please make an appointment with the instructor as soon as possible. The Disability Resource Center (DRC) provides a variety of accommodations and services to currently enrolled UCSC students to support them in making the most of their educational experience.

To learn more about the services UCSC offers to accommodate students with disabilities, consult the DRC web site at: <u>https://drc.ucsc.edu/about/about-us/index.html</u>

# Accommodation to Students' Religious Holidays

UC-Santa Cruz shall provide accommodation on any graded class work or activities for students wishing to observe religious holidays when such observances require students to be absent from class. It is the responsibility of the student to inform the instructor, in writing, about such holidays before the add deadline. If such holidays occur before the add deadline, the student must notify the instructor, in writing, at least three days before the date that he/she will be absent. It is the responsibility of the instructor to make every reasonable effort to honor the student request without penalty, and of the student to make up the work missed.

#### **Consent for Recording of Class and Public Sharing of Instructor Material**

Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

## Library Assistance

For questions concerning assistance with the UCSC collections, please contact the Research Help Librarians at <u>research@library.ucsc.edu</u> or 831-459-2076.

# **UCSC Writing Support**

The UCSC Learning Support Services (LSS) is available to undergraduate students. LSS writing tutors are undergraduate peer tutors who provide writing assistance across all disciplines to support students in their academic and career goals. To make an appointment or refer to the numerous online resources offered, visit the LSS website at https://lss.ucsc.edu/programs/writing-support/index.html

## UCSC Counseling and Psychological Services (CAPS)

All currently enrolled undergraduate and graduate students at the University of California at Santa Cruz, regardless of insurance type, are eligible to utilize CAPS services. Note that there is no guarantee of a particular length of service or type of service at CAPS, and CAPS operates using a "brief therapy model," meaning that typically when we provide individual counseling, it entails just

up to a handful of sessions rather than open-ended, ongoing counseling. To schedule an appointment or learn more, visit CAPS website at: <u>https://caps.ucsc.edu/counseling/index.html</u>

#### **Dropping and Adding**

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Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Please notify the instructor if you decide to drop the class.

#### ENVS 145 – PLANNING GREEN CITIES SUMMER 2024

#### COURSE SCHEDULE

Date	Торіс	Reading Due on That Date N	Memo/Paper Due
Jun. 25, 2024	Introduction; Sustainability Theory	Course Syllabus; Canvas files	None
		1) Wheeler, Stephen B. Planning for	
		Sustainability 2013. Chap. 1-3 (pp. 1-60). Available on Canvas 2) TED Talk: Steffen, Alex. "The Route to Sustainable Future." 2005. <u>https://www.youtube.com/watch?v</u> =zjcX8tr7Eo4	
Jun. 27, 2024	Our Economy, Economic and Population Growth, and Environmental Limits	1) Heinberg, Richard. <i>The End of</i> <i>Growth, Adapting to Our New Economic</i> <i>Reality.</i> 2011, Chapter 1. (pp. 27-54) <b>Available on Canvas.</b>	None
		2) Meadows, Donella & Dennis,	
		Randers, Jorgen. <i>The Limits to</i> <i>Growth: the 30-Year Update.</i> 2004. (Summary/Synopsis). <b>Found at</b> : <u>http://donellameadows.org/archive</u> <u>s/a-synopsis-limits-to-growth-the-3</u> <u>0-year-update</u>	
Jul. 2, 2024	Current Environmental Challenges	<b>1)</b> Heinberg, Richard. Chapter 3. (pp. 105-153) <b>Available on Canvas</b>	Reading Memo #1 for Jun. 25, Jun. 27, or Jul. 2
		2) Wallace-Wells, David, The Uninhabitable Earth, <i>New York</i> <i>Magazine</i> , July 2017. Found at: https://nymag.com/intelligencer/2 017/07/climate-change-earth-too-h ot-for-humans.html	readings
		<b>3)</b> U.S. Global Change Research	
		<ul> <li>Program. 2014 National Climate</li> <li>Assessment (Highlights). Found at: http://nca2014.globalchange.gov/</li> <li>4) TED Talk: Lerner, Jaime. "Sing a Song of Sustainable Cities." 2008.</li> </ul>	

		https://www.youtube.com/watch?v =haKh9mCk3xk	
Jul. 4, 2024 <sup>1</sup>	No Class		None
Jul. 9, 2024	Socioeconomic Challenges and a Paradigm Shift to Sustainability and Green Cities	1) Goh, Cheng Siew and Rowlinson, Steve. A Paradigm Shift from Green Buildings to Sustainable Cities: Concept and Future Direction. Found at: <u>https://www.researchgate.net/publi</u> cation/327384839 A Paradigm Shi ft from Green Buildings to Susta inable Cities_Concept_and_Future _Direction	Assignment 1 (by Jul. 9 at 9:00 a.m.)
		<b>2)</b> Oxfam. An Economy for the 1%: How privilege and power in the economy drive extreme inequality and how this can be stopped. 2017. Found at: https://oxfamilibrary.openrepositor y.com/bitstream/handle/10546/59 2643/bp210-economy-one-percent- tax-havens-180116-en.pdf;jsessionid =45082D06A5A8A245951A260A1 792383F?sequence=47	
Jul. 11, 2024	Land Use Planning and Sustainability: Methodology and Tools	<ol> <li>Wheeler, Stephen. <i>Planning for</i> <i>Sustainability</i> 2013. Chapters 6 (pp. 86-104) and 12 (pp. 163-173). <b>Available on Canvas</b></li> <li>Green City Times. Green Urban Planning (website). 2020. Found at: <u>https://www.greencitytimes.com/ur</u> <u>ban-planning/</u></li> <li>Sustainable San Mateo. <i>Indicators</i></li> </ol>	Reading Memo #2 for Jul. 9 or Jul. 11 readings
		for a Sustainable San Mateo County. 2016. Found at: http://www.sustainablesanmateo.or g/home/indicators-report/	

Jul. 16, 2024	Sustainability Planning in Practice: Principles	<b>1)</b> Newman, Peter; Beatley, Timothy; and Boyer, Heather. <i>Resilient Cities – Overcoming Fossil Fuel</i> <i>Dependence</i> . 2017. Chapters 2 & 3. (pp. 53-106). <b>Available on Canvas</b>	None
		<ul> <li>2) Howard, Ebenezer, "The Town Country Magnet" in <i>Garden Cities of</i> <i>Tomorrow.</i> 1898. Found at: https://archive.org/details/gardenc itiestom00howagoog</li> <li>3) TED Talk: Green, Michael. "How Can We Make the World a Better Place in 2030." 2015 https://www.youtube.com/watch?v=o 08ykAqLOxk</li> </ul>	
Jul. 18, 2024	Sustainability Planning: International Examples	<b>1)</b> Beatley, Timothy. <i>Green Urbanism.</i> <i>Learning from European Cities.</i> 2000. Chapters 8 & 9 (pp. 232-289). <b>Available on Canvas</b>	Reading Memo #3 for Jul. 16 or Jul. 18 readings
		<b>2)</b> State of Green. Copenhagen – Solutions for Sustainable Cities. <b>Available on Canvas</b>	
		<ul> <li>3) World Bank. Three Big Ideas to Achieve Sustainable Cities and Communities. Found at: https://www.worldbank.org/en/ne ws/immersive-story/2018/01/31/3 -big-ideas-to-achieve-sustainable-citi es-and-communities</li> <li>4) Video: C-40 Cities. "We Live Here Together." 2017. https://www.youtube.com/watch?v =QxG1eLGQ41k</li> </ul>	
Jul. 23, 2024	Sustainability Planning: North America, California, Bay Area	<ol> <li>California Cap &amp; Trade Program (Review links including Program Overview, Current Regulation, Guidance Documents). Found at: <u>https://www.arb.ca.gov/cc/capandt</u> <u>rade/capandtrade.htm</u></li> <li>Association of Pay Area</li> </ol>	None
		<b>2)</b> Association of Bay Area Governments and Metropolitan	

		Transportation Commission (MTC). Plan Bay Area 2040. Found at: http://2040.planbayarea.org/	
		<b>3)</b> City of Santa Cruz. Climate Action Plan. 2012. <b>Found at:</b> https://www.cityofsantacruz.com/h ome/showdocument?id=27824	
Jul. 25, 2024	Sustainability in Everyday Planning	1) Rees, William "What's Blocking Sustainability? Human nature, cognition, and denial." in <i>Sustainability: Science, Practice &amp; Policy.</i> Volume 6/2. 2010. <b>Found at:</b> <u>http://www.gci.org.uk/Documents</u> <u>/BlockingSustainability(Final0910).p</u> <u>df</u>	
	Group Presentations and Report (Assignment 2)	Groups provide a 10-minute presentation (using PowerPoint, overheads, or other necessary aids).	Assignment 2 presentation on Jul. 25, report due Jul. 25 at 3:00 p.m.
Jul. 26-27, 2024 <sup>2</sup>	Take-Home Final Exam		

 $\frac{\text{Notes:}}{^{1} \text{ No class on Thu., July 4.}}$ 

<sup>2</sup> Take-Home Final: e-mailed out Fri., July 26 at 4:00 p.m. and due back Sat., July 27 at 4:00 p.m.

Any modification to this syllabus will be announced via e-mail or in class.

Rev. 13 June 2024