At its core, the language of sustainability is a way of referring to the long-term dependence of human and non-human well-being on the natural world, in the face of evidence that human activities are altering, damaging, and disrupting the natural systems on which we and other species fundamentally rely.1

Sustainability has emerged as the dominant framework for thinking about the present and future of cities. The 1987 Brundtland Report linked sustainability to development in a way that placed development in the context of social, ecological, and economic justice, and so included the necessity of caring for spatially and temporally distant people and places in the process of how and why we make decisions today. The broader context of justice and caring can be seen in what have been called the three pillars of sustainability: social sustainability, ecological sustainability, and economic sustainability.

This course examines strategies and approaches to address urban sustainability challenges and opportunities, and explores applications of sustainability principles through case studies, field observations, and interviews. Urban sustainability is both a practical (measurable) and utopian (imaginary) project. The inclusion of the value-laden aspects of equity and empathy for distant, even non-human, others complicates the transition to sustainable cities. How can we design and plan for urban density AND provide land where stormwater can percolate or food can be produced? Who works in AND lives with the (green) factory or the wind farm? Urban sustainability explores how we should live with each other in a world that is rapidly urbanizing and, and in the process, creating divisions between the urban landscapes we inhabit and the rural, distant landscapes that support us. The transition to sustainability asks us to design, plan, and manage our urban environments as if future generations mattered, as if everyday life of people in the city mattered, and as if ecosystem well-being mattered.

Learning objectives
At the conclusion of this course, you should be able to:
- Identify an array of opportunities and constraints for a transition to urban sustainability.
- Gain knowledge of strategies and approaches for considering, measuring, designing, and building a sustainable urban environment.
- Demonstrate critical thinking through participation in discussions and reading responses.
- Articulate the reasons urban sustainability is fundamentally inclusive of individual, social, and environmental well-being.

Required textbook

Other readings draw upon a range of sources and disciplines. They will be available either on Canvas in PDF format or online.

Course format
The course is structured on lectures, readings, videos, group discussions, field observations, and student presentations. Students are required to complete all assigned readings/viewings PRIOR to the class meeting in which they are listed on the schedule. Students will be asked to prepare a response to questions posed by each set of readings/viewings. These will be due at the beginning of class and used to direct group discussions. Graduate students are assigned additional readings, as noted in the course schedule. Undergraduate students are encouraged to read these additional sources, but it is not required to fulfill course requirements.

Course schedule (draft)

09.27 Course overview
Developing a framework for understanding and implementing urban sustainability

09.29 Roots of urban sustainability
Key topics: Defining urban sustainability; ecological urbanism; sustainable development; Brundtland Report; limits to growth

Reading:
- Wheeler & Beatley, chapters 7, 12

Graduates also read:

Assigned: #1. Walking survey (due 10.04)
10.04 Scale and systems
Key topics: City as a sustainable ecosystem; scaling up/down; Ecological Footprint; carrying capacity; CHANS; long now and big here

Reading:
- Wheeler & Beatley, chapter 49

Video:

Graduates also read:

Due: #1. Walking survey
Assigned: #2. COULD/DO ecological footprint (due 10.06)

10.06 Measures and indicators
Key topics: Baselines; indicators for sustainability; approaches to measurement; BMPs

Readings:
- Wheeler & Beatley, chapters 37, 48 (plus study chart page 398)

Skim through and familiarize yourself with basic concepts:

Video:
- Tobgay, Tshering. (2016). This country isn’t just carbon neutral - it’s carbon negative. TED Talk.

Graduates also read:

Due: #2. COULD/DO ecological footprint

10.11 Sustainability and climate plans for global cities
Key topics: International sustainable development; climate adaptation and action plans; C40 cities; City of 7 Billion

Readings:
Readings will be specific to individual study groups, and provided by instructor. Sustainability/climate plans will be examined for cities and nation states such as:
- Addis Ababa, Albania, Austin, Copenhagen, Guangzhou, Johannesburg, London, Medellin, Melbourne, Mexico City, New York City, Singapore, Tuvalu, Vancouver...

Assigned: #3 Interview (due 10.27)
10.13 Urban resiliency
Key topics: Resiliency, redundancy; mitigation and adaptation; risk, uncertainty; post-industrial landscapes

Readings:
- Wheeler & Beatley, chapter 15

Grads also read:

Video:
- On the 2011 tsunami in Fukushima https://www.youtube.com/watch?v=ImYZAZ4IE

10.18 Eutopia
Key topics: New Urbanism; informal urbanism; porosity, POPOS, passages

Reading:
- Wheeler & Beatley, chapter 16

Video:
- The Truman Show. (1998). Peter Weir, director

10.20 Ecotopia
Key topics: Speculative cities; eco-cities; bioregionalism ; future models

Reading:

Assigned: #4 Net Zero presentations (graduate students only – due 11.10)

10.25 Field trip to Roosevelt Middle School: de/construction
#28 bus leaves from UO Station South at 8:07 am.

Reading:
Familiarize yourself with the basic categories and strategies for measuring sustainable design and demolition practices as explained in the following documents:

10.27 Sustainable Eugene
Key topics: 20 minute neighborhood; sustainable consumption; urban mobility

Reading:
• Wheeler & Beatley, chapters 20, 21, 22

Study and become familiar with:
• City of Eugene. 20-minute Neighborhood. https://www.eugene-or.gov/506/20-Minute-Neighborhood

Due: #3 Interviews
Assigned: Final project: A proposal for a practical utopia. (due Wed., Dec. 7th for 8 am pinup)

11.01 Energy and environment
Key topics: Renewable energy; green economy; challenges of scale and place

Reading:
• Wheeler & Beatley, chapter 27

Study and become familiar with:

11.03 Food and soil
Key topics: Urban agroforestry; urban foodshed; soil health and carbon; food equity

Readings:
• Wheeler & Beatley, chapter 45

Videos:
• Dirt! The Movie. (2009). Online access available through UO library
VOTE!!!!

11.08  Water and waste
Key topics: Water and watersheds; urban water and waste management; green infrastructure; embodied water

Readings
- Wheeler & Beatley, chapters 28, 29

Study and become familiar with:

Graduates also read:

11.10  Net Zero/ Net Positive

Reading for undergraduates:

Due: Presentations by graduate students

11.15  Urban greens
Key topics: Urban heat island; urban forest; public open space

Reading:
- Wheeler & Beatley, chapter 23

11.17  Wildscapes
Key topics: Urban wilderness; rewilding; design and planning for more-than-human others

Reading:
- Wheeler & Beatley, chapter 24

Video:
11.22 Ethics of the sustainable urban environment
Key topics: Environmental ethics; rights of nature movements; social equity; aesthetics; advocacy

Reading:
- Wheeler & Beatley, chapter 54

Graduates also read:

Videos:
- Kimmerer, Robin Wall. (2012). Reclaiming the honorable harvest. TEDx Sitka

12.07 Presentations of final projects
There is no final exam in this course, however final projects will be pinned up and discussed during our scheduled final exam time (8 - 9:50 a.m. Wednesday, but note that the date is a Wednesday).