

# CMP 2010 – DESIGN ECOLOGIES

Spring 2020 – 3 credit hours

**CLASS TIMES: TUESDAY, 12:25PM-01:45PM**

**CLASS LOCATION: Languages & Communication Building (LNCO) 1110**

**Instructor** (lecture, 001):

Alessandro Rigolon, PhD

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Office: ARCH 240 – Office hours: Tuesday, 10:30 AM – 11:45 AM, or by appointment

**Teaching assistants** (lecture, 001):

Fabiha Pinaz: [u1119703@utah.edu](mailto:u1119703@utah.edu)

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**Lab instructors:**

Monika Roy: [monika.roy@utah.edu](mailto:monika.roy@utah.edu)

Section 002, Wednesday, 10:45 AM - 12:05 PM, FLD H 207

Section 003, Wednesday, 01:25 PM - 02:45 PM, FLD H 207

Victoria Su: [victoria.su@utah.edu](mailto:victoria.su@utah.edu)

Section 004, Friday, 01:25 PM - 02:45 PM, FLD H 202

Briam Amayaperez: [u1214830@utah.edu](mailto:u1214830@utah.edu)

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Bradley Potter: [u1269856@utah.edu](mailto:u1269856@utah.edu)

Section 006, Friday, 10:45 AM - 12:05 PM, FLD H 207

Isobel Lingenfelter: [izzy.lingenfelter@utah.edu](mailto:izzy.lingenfelter@utah.edu)

Section 008, Thursday, 12:25 PM - 01:45 PM, FLD H 207

## REQUIREMENTS FULFILLED BY THE COURSE

Department of City & Metropolitan Planning: Required for both Urban Ecology Major and Minor and the majors of Architecture and Multi-Disciplinary Design.

General Education/Bachelor Degree Requirement: Social/Behavioral Science (BF).

## COURSE DESCRIPTION

Welcome to Design Ecologies! I am so glad that you are taking this course. Throughout the semester, we will explore the complexity of human settlements. By the end of this course, you will have gained a working vocabulary and increased visual literacy of the ecology of cities. You will also begin to recognize how cities are able to creatively respond to today's challenges and opportunities. To get there, we will learn how cities evolve and adapt overtime, and how social, economic and environmental systems work together to shape their evolution. Sometimes our cities are intentionally designed, and sometimes their forms and functions adapt organically to social changes, technological changes, wealth, poverty, natural disasters, pollution, waste streams, disease or war, among other influences.

Over the semester, we will observe and analyze the ways that cities comprise an urban ecology. We will look at historic and contemporary design strategies that have shaped our region and cities throughout the world, including ways to create equitable and sustainable places. We will also analyze the cultural and environmental tensions that emerge in cities. These include forces such as environmental racism, economic and social inequities arising from poor access to mobility, food, clean air and water, education and public goods. The course will also look at the need for advancing resilient infrastructure and ways of responding to climate change.

The more we understand the forces that shape human settlements, acknowledging the unintended consequences of our city-building choices, the more we can adapt urban ecosystems to be resilient, sustainable, just, and exciting places. By learning how to think like an ecosystem, we are more adequately equipped to manage change in our cities and regions. By observing the complex ways our planet functions at a variety of scales, we discover the best possibilities for preserving and transforming our places. This design ecologies course will inform your relationships with systems that contribute to the health and quality of your life and the communities you live in.

## DESIGN FOUNDATIONS PROGRAM OVERVIEW

Design Ecologies is one of three courses in the College of Architecture + Planning's Design Foundations program. Design Foundations is aimed at fostering an "ethic of care" in designers, planners, architects, and others interested in the built environment. Two intrinsic dimensions of an ethic of care are to think systemically and engage empathetically. To develop these dimensions, the Design Foundations program begins with three courses, which students are encouraged to complete in their first year: DES 2630: Design Contexts, CMP 2010: Design Ecologies, and ARCH 2630: Design Foundations Workshop. Together, these courses offer a mix of lecture/discussion (thinking), engagement experiences (doing), and visual communication and literacy (seeing and representing). The courses are taught collaboratively by planning, architecture, and design faculty and provide a solid foundation for entry into the architectural studies, multi-disciplinary design, and urban ecology majors. All students in the college are required to complete the three courses prior to entry into one of the major programs.

The Design Foundations program includes coursework and co-curricular support systems such as lab instructors, teaching assistants, a student success team providing advising and allied student support services, and a dedicated librarian at the Marriott Library.

By the end of the Design Foundations program, you will be able to:

- Identify various design disciplines and their connection to the built environment at multiple scales.
- Understand the interconnected design methods and impact of each design discipline.
- Present and identify their own research of design methods in varying professions at different scales.
- Engage equity and social/ecological sustainability as tools for advancing the design processes.
- Identify your relationships with urban ecological systems.

## LEARNING OBJECTIVES

Our primary objectives for the class are to:

- Develop your observational and diagnostic skills when looking at cities;
- Strengthen your ability to raise questions about city building processes and outcomes;
- Develop your systems-thinking skills;
- Broaden your knowledge of the built environment professions, and;
- Strengthen your knowledge of the complex relationships you have with the places you care about.

This course will prepare you for more study as an urban ecology major, multi-disciplinary design or architecture major (and many others!) The course will also inform your roles as citizens in the processes of community change. Because the course explores relationships among all elements of urban ecosystems, it will add value to any course of study where an understanding of the ways social, environmental, and economic systems affect cities and regions is needed. Above all, this course invites students to begin thinking about their creative responses to the problems of our time.

## LEARNING OUTCOMES

Students can expect to acquire basic knowledge and begin to develop skills in the following areas:

- Principles of urban ecology
- Understanding phenomenological responses to our movement through time and space
- The roles of the built environment professions (planning, urban design, landscape architecture, architecture, civil engineering, law, etc.), in shaping human settlements
- The foundational importance of the design and development of mixed-use neighborhoods and buildings
- Ecological planning and design
- Systems thinking
- Transition strategies for cities
- Urban agriculture, green infrastructure, and biophilic cities
- Urban metabolism
- Social, environmental and economic justice
- Specific skills in visual literacy through the lab component of the course

## COURSE FORMAT

The course will comprise two parts: lectures (section 001) and labs (sections 002-008). All lectures will include some small group activities and, in many cases, short class assignments that will be graded. The course will be organized in four major sections, including “Urban Systems,” “Scale and Density,” “Infrastructure,” and “Cities as Places.”

In the corresponding lab sessions, instructors will guide students in the use of various design tools including but not limited to pencils, computer-aided design programs, photography, and video. Students will be invited to use their personal experience of the campus and city to inform creative responses to the challenges and opportunities they observe.

## COURSE REQUIREMENTS

### 1. POINTS OF VIEW ESSAYS (POV)

Students are expected to prepare a single-page, well-crafted written response to the topic introduced by the professor at each class lecture. The POV papers will briefly summarize the main topic and include students’ reflections on the topic and the readings. It is key that students refer to the content discussed in class and reported in the readings and videos. Detailed instructions are on the assignments page in Canvas. POVs are to be submitted via Canvas only and are due on the Monday after each lecture at 11:59 PM. There will be a total of 12 POVs. Canvas will drop your lowest POV grade to calculate the total grade for your POVs. **Please use the POV template that we provide.**

### 2. LAB PROJECTS

There will be a total of 7 lab projects focused on some of the content we will cover in the lecture section. You will learn programs such as Adobe Illustrator and Spark. Please make sure you have them installed on your computer early. Instructions are provided in the lab assignments on Canvas. Canvas will drop your lowest Lab grade to calculate the total grade for your Labs. **Lab instructors will record lab attendance.** For each lab session you will miss without a documented legitimate reason, you will lose 1 point (out of total 10 attendance points).

### 3. FINAL PAPER

Halfway through the semester, each student will focus on a **current controversial project or initiative** they observe in the Salt Lake region or in the region where they are from. At the end of the semester, students will submit a paper describing the controversial project or initiative and providing an analysis of the situation through the lens of urban ecology (social, environmental and economic systems). Detailed instructions are on the assignments page in Canvas. We strongly encourage you to read the assignment early in the semester in order to anticipate your creative response and to meet with the instructor or teaching assistants to discuss ideas. A list of references and appropriate in-text citations in [APA style](#) are required. **Please use the Final Paper template that we provide.**

### 4. ATTENDANCE AND IN-CLASS ASSIGNMENTS

Students are expected to attend all class sessions, complete all assigned readings, participate in discussions, and complete short in-class assignments. In most of the class sessions, there will be short

in-class assignments to be completed individually or in a group. These assignments will focus on finding creative solutions to controversial issues faced by designers and planners. If you don't attend class and miss those assignments, there will not be any make-up opportunities.

**EVALUATION**

This course will be graded using half grades (A+, A, A-, B+, B, B-, etc.). Grade allocations for each assignment are as follows:

POV ESSAYS:	_____	30%
LAB PROJECTS:	_____	30%
FINAL PAPER:	_____	30%
IN-CLASS ASSIGNMENTS:	_____	10%

We will use the following grading scale for the total final grade.

	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Score	93-100	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	60-62	0-59
GPA	4	3.7	3.3	3	2.7	2.3	2	1.7	1.3	1	0.7	0

**COURSE READINGS AND MATERIALS**

All course readings and assignments will be made available to you online through Canvas. We will also open up the online chat room, which you are free to use as a discussion forum.

Students are *not required* to obtain a textbook for this course. All readings are provided on Canvas. Lab instructors will guide students to the software needed to complete lab assignments. Students are expected to have a video-recording camera such as those included in smartphones and tablets.

**POLICY ABOUT TIMELINESS AND LEGITIMATE REASONS**

I am confident you will submit all assignments in a timely and professional manner. Assignments are due at the times reported in the schedule and on Canvas. If you submit late, your assignment grade will drop by 7 percent for every 24 hours of delay (from 100% to 93% for 0-24 hours, from 100% to 86% for 24-48 hours, etc.). If you need additional time for assignments for legitimate reasons, please notify me at least 48 hours before the assignment is due.

**Legitimate reasons** include a prolonged illness that incapacitates you for weeks, participation in U of U athletics, participation in any other U of U affiliated group, military deployment, and severe family emergencies. For example, an illness of a day or two is not an excuse for a late paper. You are expected to provide evidence that proves the reason why you are requiring an accommodation.

## CLASS SCHEDULE

This is a tentative class schedule that might undergo some adjustments. The lab assignments might also undergo some changes.

WEEK	DATE	TOPIC
<b>1</b>	1/7 1/8-1/10	<b>Course introduction and Embodied Energy</b> <b>Lab 1 (Embodied Energy) work</b>
<b>2</b>	1/14 1/15-1/17	<b>Urban Systems – Systems Thinking</b> Video: <a href="#">The Criteria for Change</a> by Orr Reading: <a href="#">The Designer’s Challenge</a> by Orr; Introduction to Understanding Urban Ecosystems by Nilon et al. (Canvas) <b>Lab 1 (Embodied Energy) work</b>
<b>3</b>	1/21 1/22-1/24	<b>Urban Systems – Urban Ecology &amp; Environmental Justice</b> Video: <a href="#">Green Gentrification on the Los Angeles River</a> by Christensen Reading: Why is Understanding Urban Ecosystems Important to People Concerned About Environmental Justice? By Bryant and Callewaert (Canvas) <b>Lab 1 (Embodied Energy) due 30 minutes before your lab session</b> <b>Lab 2 (The Ecology of Things) work</b>
<b>4</b>	1/28 1/29-1/31	<b>Scale and Density – Public Spaces and Scale</b> Video: <a href="#">How public spaces make cities work</a> by Amanda Burden Reading: Senses and Scale by Gehl (Canvas) <b>Lab 2 (The Ecology of Things) due 30 minutes before your lab session</b> <b>Lab 3 (Explorations of Scale) work</b>
<b>5</b>	2/4 2/5-2/7	<b>Scale and Density – Residential Density and NIMBYs</b> Video: <a href="#">The San Francisco activists who say please build in my backyard</a> by PBS Readings: <a href="#">Visualizing Density, Introduction</a> by Campoli and MacLean; <a href="#">The NIMBY Principle</a> by Bliss <b>Lab 3 (Explorations of Scale) work</b>
<b>6</b>	2/11 2/12-2/14	<b>Infrastructure – Water</b> Videos: <a href="#">Utah’s Uncertain Water Future</a> by KUED; <a href="#">Las Vegas Expansion Time Lapse</a> by Satellite Timelapse Readings: Cadillac Desert, Introduction by Reisner (Canvas); Ecology: A Pocket Guide by Callenbach (Canvas) <b>Lab 3 (Explorations of Scale) due 30 minutes before your lab session</b> <b>Lab 4A (Water Relationships) work</b>

WEEK	DATE	TOPIC
7	2/18  2/19-2/21	<p><b>Infrastructure – No Time to Waste: The only species that creates garbage</b></p> <p>Videos: <a href="#">Where Does New York City's Trash Go?</a> By The New York Times; <a href="#">Landfill Fight</a> by KCET</p> <p>Reading: Waste Equals Food by McDonough and Braungart (Canvas)</p> <p><b>Final paper – Topic and Outline due by 9 AM on Canvas</b></p> <p><b>Lab 4A (Water Relationships) due 30 minutes before your lab session</b></p> <p><b>Lab 4B (Water Relationships) work</b></p>
8	2/25  2/26-2/28	<p><b>Infrastructure – Transportation: From the Rail to the Car to the Rail Again?</b></p> <p>Videos: <a href="#">Did GM Really Kill the Streetcar in Los Angeles?</a> (0-5:15) By City Beautiful; <a href="#">How Highways Wrecked American Cities</a> by Vox; <a href="#">Los Angeles' Light Rail Extension Runs Parallel to Congested Freeways</a> by CBS; <a href="#">The Real Reason Streetcars Are Making a Comeback</a> by Vox.</p> <p>Reading: Back to the Future in Transportation Planning (Canvas) by Boarnet.</p> <p><b>Lab 4B (Water Relationships) due 30 minutes before your lab session</b></p> <p><b>Lab 5 (Mobility) work</b></p>
9	3/3  3/4-3/6	<p><b>Infrastructure – Transportation and Housing Affordability</b></p> <p>Videos: <a href="#">Meet the 'Super Commuters'</a> by TODAY; <a href="#">How Private Buses Became a Symbol of San Francisco's Divide</a> by PBS.</p> <p>Readings: <a href="#">When Public Transportation Leads to Gentrification</a> by Turrentine; <a href="#">Transit-Oriented Development? More like Transit Rider Displacement</a> by Rosenthal</p> <p><b>Lab 5 (Mobility) work</b></p>
10	3/10  3/11-3/13	<p><b>Spring break, no classes</b></p>
11	3/17  3/18-3/20	<p><b>Infrastructure – Urban Food Systems</b></p> <p>Videos: <a href="#">Urban Farming: Fixing the Broken Food System &amp; Improving Health</a> by Myers; <a href="#">The Hidden Costs of Hamburgers</a> by Reveal; <a href="#">Colin the Chicken</a> by Portlandia</p> <p>Reading: <a href="#">It's Not the Food Deserts: It's the Inequality</a> by Florida; <a href="#">Mobile Farmers Market to Serve 'Food Desert' Communities in West S.L.</a> by Stilson.</p> <p><b>Lab 5 (Mobility) due 30 minutes before your lab session</b></p> <p><b>Lab 6 (Food Diaries) work</b></p>

WEEK	DATE	TOPIC
12	3/24	<b>Infrastructure – The Air We Breathe</b> Videos: <a href="#">The Air We Breathe</a> by KUED; <a href="#">China's Toxic Smog</a> by BBC News. Readings: <a href="#">Understanding Utah's Air Quality</a> by Utah Department of Environmental Quality; <a href="#">15 Major Cities Around the World that Are Starting to Ban Cars</a> by Business Insider
	3/25-3/27	<b>Lab 6 (Food Diaries) work</b>
13	3/31	<b>Cities as Places – Biophilic Cities</b> Video: <a href="#">London National Park City</a> by London National Park City; <a href="#">Buildings That Teach: IslandWood Green Design and Architecture</a> by IslandWood. Reading: Biophilic Cities (Canvas) by Beatley
	4/1-4/3	<b>Lab 6 (Food Diaries) due 30 minutes before your lab session</b> <b>Lab 7 (Biophilic Design) work</b>
14	4/7	<b>Cities as Places – Community-based, Participatory Planning</b> Video: <a href="#">Green Space Action for Community Health: Unity Park, Groundwork Richmond</a> by Groundwork USA; <a href="#">We Let Kids Design Our City – Here's What Happened</a> by Mintzer Reading: Community-Driven Place Making (Canvas) by Hou and Rios
	4/8-4/10	<b>Lab 7 (Biophilic Design) work</b>
15	4/14	<b>Conclusion – Urban Metabolism</b> Video: <a href="#">Little Denmark</a> by BIG Readings: <a href="#">Urban Metabolism and the Nature of Sustainable Cities</a> by UCLA IoES; The study of urban metabolism and its applications to urban planning and design (Canvas) by Kennedy et al.
	4/15-4/17	<b>Lab 7 (Biophilic Design) due 30 minutes before your lab session. Final presentation of Lab 7 and Lab wrap-up</b>
16	4/21	<b>Work session on the Final Paper – No POV due</b>
	4/22-4-24	Classes end on 4/21. No labs this week.
17	4/27	<b>Final Papers due by 11:59 PM on Canvas</b>

## STUDENT-FACULTY RESPONSIBILITIES

Faculty must strive in the classroom to maintain a climate conducive to thinking and learning. The University and your instructor expect regular attendance at all class meetings. More than one unexcused absence will affect a student's participation grade negatively. Students are responsible for acquainting themselves with and satisfying the entire range of academic objectives and requirements as defined by the instructor.

All students are expected to maintain professional behavior in the classroom setting, according to the University of Utah Student Code (<http://regulations.utah.edu/academics/6-400.php>). Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Code carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty's responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

All course materials, including student-produced case studies, reading discussion presentations, interview transcriptions and analyses, and research papers, are considered to be University property and subject to GRAMA regulations and the Student Code. Student work may be collected and used by the College for review and accreditation purposes.

## NON-CONTRACT NOTE

The syllabus is not a binding legal contract. It may be modified by the instructor with reasonable notice of the modification. If you would like more information on University academic policies, please see: <http://regulations.utah.edu/academics/guides/instruction/courseContents.php>.

## ETHICAL CONFLICT

No student is required to participate in an activity that creates a religious, political, and/or moral conflict for the student. If you feel that you that any activities associated with this course will create a religious, political, and/or moral conflict for you, please contact Associate Dean Keith Bartholomew ([bartholomew@arch.utah.edu](mailto:bartholomew@arch.utah.edu); 801-585-8944), and he will explain your options.

## CANVAS

The course uses the Canvas platform to provide lecture slides, case studies, etc., by both the instructor and the students, as well as to provide instant access to grades. You are "charged with notice" for any information posted on the course Canvas site during the semester. That means we will assume you have received information posted to the site and that you take responsibility for the consequences if you choose to not check the site regularly. If you are not already familiar with Canvas, you can learn about it at: <https://utah.instructure.com/courses/23633/pages/front-page>.

## COURTESY

Please arrive on time. By the same token, please wait until the official end of class to start packing up your books and other belongings. If we go over the scheduled time by a minute or two, please be

courteous. Please turn off cell phones and other mobile devices, unless they are being used for a class activity.

### IMPORTANT DATES

The last day to drop or add classes is August 30th, and the last day to withdraw is October 18th.

### STUDENT SUPPORT

#### WELLNESS

Please speak with the instructor if there is any additional support you would like to discuss for this class. The University offers many support services – some are listed below. Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at [www.wellness.utah.edu](http://www.wellness.utah.edu) or 801-581-7776.

#### STUDENT VETERANS

If you are a student veteran, please know that the University of Utah has a Veterans Support Center on campus, located in Room 161 in the Olpin Union Building (M-F 8 am - 5 pm). Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>.

#### LGBTQ SUPPORT

If you are a member of the LGBTQ community, please know that our classroom is a safe zone. Additionally, the University of Utah has an LGBT Resource Center on campus, located in Room 409 in the Oplin Union Building (open M-F 8 am - 5 pm). You can visit their website to find more information about the support they can offer, a list of events through the center, and links to additional resources: <http://lgbt.utah.edu/>.

#### PREFERRED NAMES AND PRONOUNS

Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name on your UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email [bpeacock@sa.utah.edu](mailto:bpeacock@sa.utah.edu) to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

#### ENGLISH AS A SECOND LANGUAGE

If English is your second language, please be aware of several resources on campus that will support you with your language development and writing. These resources include: the Department of Linguistics EAS Program (<http://linguistics.utah.edu/eas-program/index.php>); the Writing Center

(<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); and the English Language Institute (<http://continue.utah.edu/eli/>).

## ADA STATEMENT

Americans with Disabilities Act (ADA) Statement: The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 801-581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

## CAMPUS SAFETY

The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit [safeu.utah.edu](http://safeu.utah.edu).

## ACADEMIC MISCONDUCT

Academic misconduct includes cheating, plagiarizing, research misconduct, misrepresenting one's work, and inappropriately collaborating. Definitions of these and other terms can be found in the Student Code at <http://www.regulations.utah.edu/academics/6-400.html>. The Student Code (at section 6-400(V)) also specifies the required procedures that must be followed when disciplinary actions are taken in response to instances of academic misconduct. For students enrolled in degree programs in the College of Architecture + Planning, a second occurrence of academic misconduct will result in the student's dismissal from their academic program.

## ADDRESSING SEXUAL MISCONDUCT

Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted on the basis of your sex, including sexual orientation or gender identity/expression, you are encouraged to report it to the University's Title IX Coordinator; Director of the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or to the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To make a police report, contact the Department of Public Safety, 801-585-2677(COPS). Additional information regarding reporting and victim supportive resources are available at the offices listed above.