ENST 406 | Urban Sustainability Senior Seminar | Spring 2023

Tuesday 1:30 – 4:30 Kaufman 187

Instructor

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Course Description

The United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs." Some critics argue that urban sustainability is a contradiction within itself. With the current climate crisis, it is becoming increasingly critical for cities to rethink urban planning, development, and management to ensure sustainable use of natural resources. In this senior seminar we will explore the social, economic, and environmental dimensions of sustainable urbanism. We will discuss a range of student led topics throughout the semester, which may include components of urban form, transportation, green space, buildings and energy, or flows of water, food, and waste. Recent journal articles and student led topics will be the focus of class discussions. As a class we will analyze these topics collaboratively and we will use this class as a space to learn from one another and to engage in civil discourse.

Course Learning Objectives

- Students will apply their interdisciplinary understanding of the human-environment relationship to explore the ways in which human and natural activities affect sustainability in urban environments.
- Students will identify key ecological and environmental concepts that are intricately tied to urban sustainability issues.
- Students will improve their critical thinking skills when evaluating ideas related to human and natural dimensions of urban sustainability.
- Students will evaluate and discuss primary literature that pertains to urban sustainability
- Students will deepen their ability to communicate scientific information and to express their views both written and orally.

Instructional Materials

There will not be a textbook for this course. Readings will be drawn from books, peer-reviewed journal articles, and web-based literature. All readings will be posted on Teams. It is your responsibility to check Teams regularly for course updates. As you prepare your student-led class discussions, additional outside resources should be consulted.

Special note: This syllabus lays out our plans for learning together this semester. Included is information about what we will learn, how we will learn, information about assignments, grading, policies, and resources for students. Teams will have the most current information and detailed schedule of topics, activities, readings and assignments.

Grading: This course will take an approach to grading that may be unfamiliar. You will have primary responsibility for evaluating your work. This makes sense in a senior seminar for several reasons. First, after you graduate, you are unlikely to receive grades for your most significant efforts (yes, even if you go to graduate school!). This is therefore a key time to develop skills in self-reflection and self-evaluation that will serve you in the future. Second, you are becoming advanced scholars in environmental studies and science, and therefore have considerable knowledge and experience upon which to draw. Lastly, educational research¹ suggests that traditional letter grades can erode intrinsic motivation, a particularly important ingredient in a senior seminar. My hope is that this approach will allow you to focus on the quality of your work and your growth as an environmental scholar and practitioner.

So, how will you earn a grade? To pass the course you need to complete all assignments. Your letter grade will be based on self-reflections you complete at the midterm and final assessing your work and suggesting what you feel is a fair grade. I reserve the right to adjust these grades in either direction if I feel the proposed grade does not accurately reflect the quality of the work. While I will not assign letter grades or points, I will provide constructive and detailed suggestions on submitted work, and you will also receive feedback from your peers.

Required coursework (must be completed to pass the course)

Assessment Categories	Details
Participation and Professionalism	Attend class meetings (exceptions for illness)
	Engage actively + respectfully
Pre-Class Assignments/Readings	Complete at least 8 out of 11 pre-class reading assignments
	(weeks 2 and 4 are required)
Career Development Resume and cover letter	
Student-led Interactive Class	Lead a class session (~1 hour) on a topic of your choosing.
	Include an interactive component.
Capstone Project	Project pitch (5 minutes) + work plan
	Annotated bibliography
	Draft project
	Final project
Self-evaluations/reflections	Mid-semester
	End-of-semester
	*This will guide your midterm and final grades

^{1.} Schinske, J. and Tanner, K. 2014. Teaching more by grading less (or differently). CBE – Life Sciences Education 13: 159-166.

Pre-Class Assignments: It is expected that you will complete all reading and accompanying assignments in preparation for class discussion. Each week you will write a discussion paper reacting to a reading, combination of readings, or other prompt. The paper should offer a critical analysis, not a summary of the readings or your personal opinion about the topic. The best "reaction" will identify how different readings (and the ideas they represent) relate to each other or other topics we've discussed. In addition, you can reflect on how well each reading accomplishes its objectives.

When preparing your reaction paper, you should first understand each reading individually, including the central problem/topic the author is addressing, the assumptions the author makes, and the evidence used to support the author's central climate/argument/point. Then move on to considering the strengths/weaknesses of the readings, the counterarguments to the author's claims, and the "so what" of this particular topic/argument. Lastly, consider the readings in comparison to one another: how do they relate, do the authors agree/disagree, how does each author present the issue/ideas, does one argument strengthen/weaken others, and how does integrating the claims of two or more readings advance our understanding? The papers will serve to organize your thoughts for our discussion each week, and enable you to compare the range of ideas presented throughout the semester. Please be careful to allow enough time to digest the readings before putting your thoughts on paper. These short (1 page single-spaced (not including bibliography)) writing assignments will be due at the beginning of each class.

Student-led Interactive Class: Each student will lead one half of our weekly class sessions during the semester on a particular aspect of their choosing. All students must assign peer-reviewed readings to the class, provide a contextual introduction to the topic in the beginning of the class and an interactive component to the class. The specific format of the class session is up to the student leader of that session. I will provide examples of different approaches to the class early in the semester that include facilitated class discussion, presentations, debate, video, simulations, data analysis or visualization exercises, etc.

You will select a particular type of environmental change and case studies that exemplify the causes and effects of that change. Student presentations will frame the pertinent issues and ecological concepts relevant to the chosen topic. The following is a list of components you must complete as you prepare your interactive class session.

Prepare and send to me 1 week before your class session:

- A concise set of learning goals for the session
- Pdf files of your assigned readings
- Discussion guestions to facilitate a discussion of the topic and readings
- Instructions for the class activity
- A prompt describing the pre-class assignment for the class

Final Project: You will each choose a well-defined topic on which to focus this semester that explores the social, economic, or environmental dimension(s) of sustainable urbanism. I encourage you to choose a topic that you are personally invested in. There are several exciting opportunities to contribute to environmental efforts on campus and in the surrounding community. I will help to facilitate your participation with local stakeholders that are a good fit for your interests. You are also welcome to seek out your own connections/topics based on your many years of experience here at Dickinson!

The shape of the project is flexible but may take two basic forms:

- Research paper (10 pages, double-spaced, not including bibliography): This will be a good choice
 when the main goal of your project is to synthesize/present evidence and an argument in
 response to a research question, and the main audience is environmental scholars.
- Combination project: This will be a good choice when there is some outcome that is not a traditional research paper, and/or that is intended for a non-scholarly audience. For example, you may be interested in creating a storymap, podcast, lesson plan, web content, community report, policy memo, etc. In this case your final project will have two components:
 - Project outcome (content + format depend on goals)
 - Literature reflection paper (5 pages, double-spaced, not including bibliography) this shorter paper is meant to give you an opportunity to engage research to inform your project outcome. For example, if you are writing a policy memo related to climate change, the paper could synthesize research underlying the memo and/or on what constitutes effective climate communication with policy-makers.

The approach you choose, and the shape of your final project should be informed by the nature of your own talents in combination with your analysis of the underlying environmental topic. Students are welcome to collaborate in small groups to tackle different parts of a shared problem, but each member of the group must have a well-defined role and will complete their own individual product or outcome.

Participation and engagement: Participating in class discussions and presenting your work both formally and informally to the class are vital parts of this course. A large part of your learning will take place in our class sessions by listening actively, asking questions, processing content, developing and articulating your ideas, and hearing and seeking to understand others' ideas. This will require not only that you do all of the reading before coming to class, but that you reflect upon them carefully and have your thoughts collected and organized in preparation for our discussions and activities. I value quality over quantity in terms of participation and will provide rubrics that outline how participation will be evaluated during specific class activities.

Attendance: Because we meet only 14 times during the semester, every meeting is important. Attendance will not be recorded, but I expect you to be present (both literally and figuratively), punctual, prepared, and to respect yourself, your peers, and me. That said, given the ongoing pandemic it is especially important that you do not attend class if you are sick! If illness or another event prevents you from attending class, please contact me before class if at all possible. We will discuss alternative ways for you to participate despite the absence. In some cases, I may be able to facilitate virtual attendance if given sufficient notice. It is your responsibility to contact your peers and/or me to ensure that you don't miss important information or materials.

General policies

For extenuating circumstances: If you're unable to attend class due to illness or extenuating circumstances, please notify me in advance. I will alert the <u>CARE team</u> and your advisor of multiple or extended absences at my discretion.

Accommodating Students with Disabilities: Dickinson values diverse types of learners and is committed to ensuring that each student is afforded equitable access to participate in all learning experiences. If

you have (or think you may have) a learning difference or a disability – including a mental health, medical, or physical condition– that would hinder your access to learning or demonstrating knowledge in this class, please contact Access and Disability Services (ADS). They will confidentially explain the accommodation request process and the type of documentation that Dean and Director Marni Jones will need to determine your eligibility for reasonable accommodations. To learn more about available supports, go to www.dickinson.edu/ADS, email access@dickinson.edu, call (717)245-1734, or go to the ADS office in Room 005 of Old West, Lower Level (aka "the OWLL").

If you've already been granted accommodations at Dickinson, please follow the guidance at www.dickinson.edu/AccessPlan for disclosing the accommodations for which you are eligible and scheduling a meeting with me as soon as possible so that we can discuss your accommodations and finalize your Access Plan. If you will be using any test-taking accommodations in this class, be sure to enter all test dates into your Access Plan in advance of our meeting.

SOAR: Academic Success Support and More: Students can find a wealth of strategic academic success tools (like weekly planners, semester calendars, and much more) by going online to www.dickinson.edu/SOAR or to Old West's Lower Level (aka "the OWLL"). SOAR stands for Strategies, Organization, & Achievement Resources, and there you'll find apps, tips, and other resources related to organization, study skills, memory strategies, note-taking, test-taking, and more. You'll find strategies for managing your time and well-being, as well as information about academic success workshops offered throughout the semester. If you'd like to attend a workshop or request one-on-one assistance with developing a strategy for a manageable and academically successful semester, email SOAR@dickinson.edu

Quantitative Reasoning Center: Dickinson College provides additional support for students taking courses with quantitative content across the curriculum through the <u>Quantitative Reasoning (QR)</u> <u>Center</u>. For the spring 2023 semester, the QR Center will offer in-person tutoring for ENST 406, in addition to general quantitative support (e.g., learning Microsoft Excel and other software packages, use of a graphing calculator). We strongly recommend making an appointment. The QR Center is also offering remote tutoring to any student who may need it this semester.

<u>Click here</u> to make an appointment on WCONLINE. Then, access the drop-down menu under "limit to" at the top of the scheduler and select ENST 406, or the area of generalized QR support that you need. This will restrict the tutor list and schedule to only those tutors who can help with your need. When you make your appointment, please also paste or upload your assignment with any work that you have done (if applicable). The QR Center also provides in-person, drop-in tutoring, but you should check the weekly schedule and list of tutors to ensure a tutor can help with your specific need. Please refer to <u>this</u> document to help prepare for your session.

The Norman M. Eberly Multilingual Writing Center: The MWC consists of both English and foreign language writing tutoring services. The English writing tutors work with native and nonnative speakers of English, and the foreign language writing tutors work with writers of Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Russian, and Spanish. Writers of all levels and abilities need feedback in order to develop their ideas and grow as writers. Dickinson's trained peer writing tutors can help you generate ideas, begin drafting, revise a rough draft, figure out your professor's preferred

documentation style, understand and respond to professor feedback, and edit your writing – among other things.

For Spring 2023, you have the option to meet with tutors online or face-to-face in the MWC, which is located on the first floor of Waidner-Spahr Library. For online appointments, tutors will send you a Zoom link prior to your scheduled time. Please show up promptly for both online and face-to-face appointments as there will be a ten-minute grace period after which the tutor may no longer be available.

To schedule an appointment for an online or face-to-face appointment, use our scheduler at https://dickinson.mywconline.com/.

Academic Honesty: Academic integrity will be taken very seriously in this course. Students who violate College rules on scholastic dishonesty will be subject to disciplinary action, which include the possible failure of the course and/or dismissal from the College. For a brief take on this complicated issue, follow these guidelines: 1) do your own work; clear any collaborations ahead of time and give full credit; 2) cite your sources fully and explicitly; and 3) for quotations, use quotation marks and cite fully; for summary or paraphrase, cite fully and explicitly at the end of the relevant paragraph or sentence. For further details, please read carefully and be familiar with the Community Standards on the Dickinson College website https://www.dickinson.edu/download/downloads/id/963/community_standards

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Tentative Schedule of Topics

Week	Date	Topic
1	Jan 24	Course introduction and planning
		Define urban, define sustainability
		Brainstorm Urban Sustainability Challenges
2	Jan 31	Environmental Problem Solving
		Assignment: Read the literature posted on Teams and reflect
3	Feb 7	Capstone Project Pitch (5 minutes) + work plan peer review
		Assignment: Finalize student-led class schedule and topics
4	Feb 14	Conceptualizing Urban Sustainability/How do we approach urban
		sustainability?
		Assignment: Read the literature posted on Teams and reflect
5	Feb 21	Science Communication Round Table
6	Feb 28	Workshopping your resume and cover letter
		Assignment: Annotated Bibliography due, peer review
7	Mar 7	Student-led class:
		1:
		2:
		Assignment: Mid-term self-evaluation due
	Mar 14	Spring Break
8	Mar 21	Student-led class:
		1:
		2:
9	Mar 28	Student-led class:
9	IVIdi 28	1:
		2:
		2.
10	Apr 4	Student-led class:
	7.0.	1:
		2:
11	Apr 11	Student-led class:
		1:
		2:
12	Apr 18	Student-led class:
		1:
		2:
13	Apr 25	Capstone project drafts due, peer evaluations
14	May 2	Course debrief and evaluations
15	May 12	Final Projects and Final Self-Evaluation Due 5PM