

Water Management and Urban Sustainability in Amsterdam

ENVI-3060 (3 credits)

Netherlands: SIT Track Option

This syllabus is representative of a typical semester. Because courses develop and change over time to take advantage of unique learning opportunities, actual course content varies from semester to semester.

Course Description

If the history of the Netherlands runs parallel to – and can be mapped onto – the country's shifting approaches to water management, then the development of its capital city represents a case study for foregrounding water management in the design of a sustainable city. Against the backdrop of rising sea levels and the increasing frequency of extraordinary weather events, this course will examine both how the Netherlands' long history of managing and redirecting water (culminating in the Delta Works project in particular) has impacted the historical development of the city of Amsterdam writ large, and how the city has more recently leveraged the ubiquity of water in an effort to create a sustainable city. In particular, the course will trace how the city of Amsterdam has integrated water and (newly developed) water infrastructures in its policy solutions to the principal sustainability challenges facing cities in the 21st century, from increasing affordable housing and expanding public transportation systems, to maintaining green spaces, reducing the carbon footprint of a global city, and addressing the effects of overtourism. Conceiving of the city as a living laboratory, this course will weave in and out of a theoretical understanding of sustainability and sustainable urban design (informed by the leading global frameworks for defining and evaluating sustainability) and a real-world, evidence-based assessment of how the city of Amsterdam has implemented these principles in its effort to make (more) sustainable its key urban systems and functions.

Learning Outcomes

Upon completion of the course, students will be able to:

- Demonstrate an in-depth understanding of the history of water management in the Netherlands, including its chief characteristics and historical development, and the ways in which the capital city of Amsterdam has been shaped and re-shaped by water
- Articulate – and distinguish between – the leading models of sustainable development and sustainable urban design, and rigorously apply one or more of these models to the city of Amsterdam's sustainability agenda

- Assess the relative success levels of global cities' sustainability agendas, and position and appraise the city of Amsterdam's current and proposed sustainability goals against those of its peer cities
- Evaluate the strengths and weaknesses of the city of Amsterdam's approach to addressing the sustainability impact of one or more key urban systems, while attending to the role water plays in the proposed policy solution(s)

Language of Instruction

This course is taught in English.

Instructional Methods

SIT's teaching and learning philosophy is grounded in the experiential learning theory developed by Kolb (1984; 2015) and informed by various scholars, such as Dewey, Piaget, Lewin, among others. Experiential learning theory recognizes that learning is an active process that is not confined to the formal curriculum; "knowledge is created through the transformation of experience" (Kolb, 2015, p. 49). Learning involves both content and process. Learning is holistic and happens through various life experiences upon which students draw to generate new ways of knowing and being. Learning involves a community and is a lifelong endeavor. Learning is transformational.

The suggested four step-cycle of a *concrete experience*, *reflective observation*, *abstract conceptualization*, and *active experimentation* embedded in the experiential learning model is not linear and might not always happen in that specific order, as any learning is highly context dependent. These stages of taking part in a shared experience; reflecting on that experience by describing and interpreting it; challenging their own assumptions and beliefs to generate new knowledge; and ultimately applying new knowledge, awareness, skills, and attitudes in a variety of situations and contexts are important for students to engage in to become empowered lifelong learners.

Required Texts

Book chapters and articles outlined below under Course Schedule, and posted in Canvas in Files. This is a selection of those texts:

- Betsky, Aaron, and Adam Eeuwens. *False Flat: Why Dutch Design Is So Good*. Phaidon, 2008.
- City of Amsterdam. *Our City of Tomorrow: A Sustainable Future for the City of Amsterdam*. https://assets.amsterdam.nl/publish/pages/867626/our_city_of_tomorrow_2.pdf.
- Cucuzzella, Carmela, and Sherif Goubran. "Caught between Measurement and Meaning." *Sustainable Architecture: Between Measurement and Meaning*. Vernon Press, 2021.
- Curtis, Carey, and Jan Scheurer. "Polycentric and Multimodal Interfaces in the Dutch Randstad." *Planning for Public Transport Accessibility: An International Sourcebook*. Routledge, 2016.

- De Roo, Gert, and Donald Miller. "Environmental Planning and the Compact City: A Dutch Perspective." *Compact Cities and Sustainable Urban Development: A Critical Assessment of Policies and Plans from an International Perspective*. Routledge, 2019.
- European Commission. *Sustainable Development Goals*. https://commission.europa.eu/strategy-and-policy/sustainable-development-goals_en.
- Greiving, Stefan, and Mark Fleischhauer. "National Climate Change Adaptation Strategies of European States from a Spatial Planning and Development Perspective". *Climate Change and Sustainable Cities*. Edited by Hugo Priemus and Simin Davoudi. Routledge, 2014.
- Lintsen, Harry, et al. *Well-being, Sustainability and Social Development: The Netherlands 1850–2050*. Springer, 2018.
- Mora, Luca, and Roberto Bolici. "How to Become a Smart City: Learning from Amsterdam." *Smart and Sustainable Planning for Cities and Regions*. Edited by Adriano Bisello, et al. Springer, 2017. 251-167.
- OECD. *The Governance of Land Use in the Netherlands: The Case of Amsterdam*. OECD Publishing, 2017.
- Shorto, Russell. "The Water Problem." *Amsterdam: A History of the World's Most Liberal City*. Little, Brown Book Group, 2013.
- Vossestein, Jacob. *The Dutch and Their Delta: Living Below Sea Level*. XPat Scriptum Publishers, 2015.
- Wessels, Tom. "The Myth of Growth: Limits and Sustainability". *The Myth of Progress: Toward a Sustainable Future*. Revised and Expanded Edition. University Press of New England, 2013.
- Williams, Jo. "Circular Amsterdam". *Circular Cities: A Revolution in Urban Sustainability*. Routledge, 2021.
- ---. "Conceptualizing Circular Cities". *Circular Cities: A Revolution in Urban Sustainability*. Routledge, 2021.

Assignments

Participation (15%)

Students are expected to be physically and mentally present for all classes. To prepare for class, students should critically read the assigned texts prior to each class and come prepared with relevant questions and insights.

Annotation exercise (15%)

Students will be asked to annotate/critically mark up an excerpt of a course-related public policy document. Intended to straddle the line of visual and textual learning, and to begin to hone students' close reading skills, students will use arrows, dotted lines, and other visual symbols (which would be outlined in detail) to ask explanatory and critical questions, identify key points, arguments/assumptions and logical leaps/fallacies, and link back to concepts already discussed in the course. This assignment would also serve as scaffolding for the policy paper assignment.

Site visit reflection paper (20%)

Students will be asked to write a short reflection paper (1,000 – 1,500 words) unpacking one of their site visits by analyzing how it furthered their understanding of one specific topic that was discussed in one specific reading. Intended to test students' ability to bring theory/policy into conversation with practice, and to tease out the (productive) tension between the two, students will be asked to produce an integrative analysis of the site visit by drawing explicitly (and in equal measure) on statements made/materials they engaged with during the site visit, and arguments advanced in the reading they select.

“Facets of the Netherlands” podcast interview (25%)

Students will be asked to follow in the footsteps of (amateur and professional) podcast hosts by recording their own podcast episode for the “Facets of the Netherlands” podcast, a wide-ranging but policy-centric podcast about different facets of Dutch culture. They and their co-host(s) will discuss and analyze a topic of their own choosing and present the audience with the ways in which this topic is currently being understood and debated, and why it constitutes an important facet of life in the Netherlands.

In a twenty-minute podcast episode (if they opt for a podcast with two hosts) or a thirty-minute episode (if they choose to have three hosts), they will demonstrate their ability to synthesize information, engage in public pedagogy, and speak convincingly and authoritatively on a topic of their own choosing. (Students are advised – but not required – to choose a topic that they will flesh out in the policy paper assignment.)

Policy paper (25%)

Students will be asked to produce a full-fledged policy proposal (1,500 – 2,250 words, with each section between 500 and 750 words), i.e. a detailed action plan that:

- is addressed and caters to a specific audience (whether that be an institutional actor, the broader public, or a stakeholder with a vested interest in the issue)
- identifies and captures the key parameters of the issue, problem, or lacuna they are seeking to address (also referred to as the policy brief – 500-750 words)
- outlines the existing policies and theories that undergird how the issue is currently understood, and provides an assessment of two policies that have either been proposed or already implemented (also referred to as the policy analysis — 500-750 words)
- establishes the need of, argues for the efficacy of, and provides evidence for an original policy to the problem they are seeking to address or solve (also referred to as the policy action – 500-750 words)

Attendance and Participation

Due to the nature of SIT Study Abroad programs, and the importance of student and instructor contributions in each and every class session, attendance at all classes and for all program

excursions is required. Criteria for evaluation of student performance include attendance and participation in program activities. Students must fully participate in all program components and courses. Students may not voluntarily opt out of required program activities. Valid reasons for absence – such as illness – must be discussed with the academic director or other designated staff person. Absences impact academic performance, may impact grades, and could result in dismissal from the program.

Late Assignments

SIT Study Abroad programs integrate traditional classroom lectures and discussion with field-based experiences, site visits and debriefs. The curriculum is designed to build on itself and progress to the culmination (projects, ISP, case studies, internship, etc.). It is critical that students complete assignments in a timely manner to continue to benefit from the sequences in assignments, reflections and experiences throughout the program.

Example: Students may request a justified extension for one paper/assignment during the semester. Requests must be made in writing and at least 12 hours before the posted due date and time. If reason for request is accepted, an extension of up to one week may be granted at that time. Any further requests for extensions will not be granted. Students who fail to submit the assignment within the extension period will receive an 'F' for the assignment.

Grading Scale

94-100%	A
90-93%	A-
87-89%	B+
84-86%	B
80-83%	B-
77-79%	C+
74-76%	C
70-73%	C-
67-69%	D+
64-66%	D
below 64	F

Program Expectations

- Show up prepared. Be on time, have your readings completed and points in mind for discussion or clarification. Complying with these elements raises the level of class discussion for everyone.
- Have assignments completed on schedule, printed, and done accordingly to the specified requirements. This will help ensure that your assignments are returned in a timely manner.
- Ask questions in class. Engage the lecturer. These are often very busy professionals who are doing us an honor by coming to speak.
- Comply with academic integrity policies (no plagiarism or cheating, nothing unethical).
- Respect differences of opinion (classmates', lecturers, local constituents engaged with on the visits). You are not expected to agree with everything you hear, but you are expected to listen across difference and consider other perspectives with respect.

- **Storing Your Work:** Keep several copies of your work as back up and keep one copy accessible to you through an online forum, such as an attachment in your email, the course learning management system, or cloud-based storage. This way your work will always be available to despite technical issues. Lost files, deleted drives, or computer crashes are not excuses for late, missing work.
- **Personal Technology Use:** Cell phones and other personal electronics can be used for taking notes and other class activities. Off-task usage is not acceptable. You may be marked as absent for habitually using them for something other than classroom activities.
- **Course Communication:** Course documents and assignments will be posted on the learning management system, Canvas. Although the course calendar provides a broad overview and the general sequence of work and assignments for the course, what we accomplish in class will vary, and revisions to the calendar will be posted at the course site. You will need to check the course site regularly. You are responsible for letting me know about any network-related problems that prevent you from accessing or submitting assignments.
- **Content Considerations:** Some texts and activities you will encounter in this course delve into sensitive topics that may be emotionally and intellectually challenging. Our classroom is a space where we can engage with challenging ideas, question assumptions, and navigate difficult topics with respect and maturity. As possible, I will flag content and activities that are especially graphic or intense, so we are prepared to address them soberly and sensitively. If you are struggling to keep up with the work or participate in the course because of the nature of the content and activities, you should speak with me and/or seek help from counseling services.
- **Classroom recording policy:** To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.]

SIT Policies and Resources

Please refer to the [SIT Study Abroad Handbook](#) and the [Policies](#) section of the SIT website for all academic and student affairs policies. Students are accountable for complying with all published policies. Of particular relevance to this course are the policies regarding: academic integrity, Family Educational Rights and Privacy Act (FERPA), research and ethics in field study and internships, late assignments, academic status, academic appeals, diversity and disability, sexual harassment and misconduct, and the student code of conduct.

Please refer to the SIT Study Abroad Handbook and SIT website for information on important resources and services provided through our central administration in Vermont, such as [Library resources and research support](#), [Accessibility Services](#), [Counseling Services](#), [Title IX information](#), and [Equity, Diversity, and Inclusion](#) resources.

Course Schedule

**Please be aware that topics and excursions may vary to take advantage of any emerging events, to accommodate changes in our lecturers' availability, and to respect any changes that would affect student safety. Students will be notified if this occurs*

Details, including site visits and assignment due dates will be fleshed out by the specifically faculty. Below you will find a breakdown of the topics covered in this course each week:

Class 1: Introduction to the course

Class 2: Defining sustainability: global and local definitions and approaches

Class 3: Amsterdam deep dive I: Amsterdam's sustainability agenda

Class 4: Compact, smart, and circular cities: models for sustainable urban development

Class 5: Amsterdam deep dive II: Amsterdam as a circular city

Class 6: Principles of water management and water governance

Class 7: The history of water management in the Netherlands, and the role of the Delta Plan

Class 8: Amsterdam deep dive III: Water management in and beyond the canals

Class 9: Sustainability challenges I: Climate change

Class 10: Sustainability challenges II: Housing

Class 11: Sustainability challenges III: Public transportation

Class 12: End-of-course reflections