

Climate Justice and Urban Sustainability

ENVI-3060 (3 credits)

South Africa: Choose Your Track—Multiculturalism, Education, Health OR Climate

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

This Climate Track course examines South Africa's environmental and sustainability challenges through historical and contemporary lenses, analyzing how colonial and apartheid legacies shape current environmental inequalities. Students will explore transformational climate action and urban justice, focusing on the limitations of incremental approaches and the need for ambitious programs toward net zero and sustainable development in urban areas. Using Cape Town as a primary case study, the course analyzes the city's Climate Change Action Plan and its vision for climate resilience, resource efficiency, and carbon neutrality. A comparative perspective with Johannesburg provides additional insights into urban sustainability strategies. Students will develop practical environmental analysis skills alongside theoretical frameworks including environmental justice, political ecology, and African environmental philosophy.

Learning Outcomes

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

- **Evaluate** foundational policy and governance frameworks shaping sustainable urban development in South Africa
- **Analyze** climate change hazards, vulnerabilities, and risks impacting South African cities, particularly Cape Town and Johannesburg
- **Compare** urban climate mitigation strategies across energy, transport, and waste management sectors
- **Assess** urban adaptation and resilience initiatives, including green infrastructure and vulnerable community support
- **Apply** environmental justice and just transition principles to critique urban development patterns and climate responses in post-apartheid South Africa

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

See the course schedule for a full list of reading assignments.

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.

Assignment Descriptions and Grading Criteria

In-Class Participation (10%) Active participation is essential for learning in this course. Students are expected to engage meaningfully in class discussions, field activities, and interactions with guest speakers and local organizations. Students will be evaluated on the quality of their contributions, critical thinking skills, respectful engagement with diverse perspectives, and ability to connect field experiences to course concepts. Participation is assessed through instructor observation during class sessions and field visits.

Field Observation Journal (30%) Students will maintain a handwritten field journal throughout the course, documenting their observations, reflections, and analyses of site visits, guest lectures, and community engagements. Journals will be collected at three points during the semester for review and feedback. Entries should connect field experiences to course readings and concepts, demonstrating critical engagement with course themes. Journal entries must be completed within 24 hours of each relevant experience to ensure accuracy and depth of reflection.

Case Study Analysis Presentation (25%) Working in pairs, students will analyze a specific environmental sustainability initiative or challenge in Cape Town. Each pair will:

1. Conduct field observations and document their analysis through photographs and notes
2. Interview at least one relevant stakeholder (arranged by course instructor)
3. Present a 15-minute critical analysis to the class using visual aids
4. Lead a 10-minute discussion about the implications of their findings

Presentations will take place during class time in the final weeks of the course. Students will be evaluated on their analytical depth, effective use of field data, critical engagement with course concepts, and presentation skills.

Capstone Analytical Paper (35%)

Students will submit a 3,000-word capstone paper at the end of the semester that demonstrates their understanding of key course concepts, engagement with theoretical frameworks, and ability to analyze complex environmental challenges in the South African context. The paper must draw on at least two course modules and include a critical analysis of a relevant case study (e.g., Cape Town's water crisis, urban planning in Johannesburg, or a green infrastructure initiative). Students should integrate environmental data, policy analysis, and scholarly sources to support their arguments. A detailed prompt, rubric, and writing guide will be provided.

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.** For an interactive course to succeed, you must be present, on time, and have your readings completed and points in mind for discussion or clarification. Being prepared with these elements raises the level of class discussion for everyone. Moreover, the content of this course is learned collaboratively, meaning that when a student isn't here, they take away from everyone's opportunity to learn. The only way to maximize our collective learning potential is if we are all here contributing. 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
- **Submit assignments on time:** 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.
- **Bring your curiosity:** Ask questions in class. Engage the guest lecturers, as these are often very busy professionals who are doing us an honor by coming to speak. Remember, there are no foolish questions, and your inquiries might help others in class who have similar ideas/thoughts. By actively participating and showing curiosity, you demonstrate respect for our guests and contribute to creating a dynamic learning environment for everyone.
- **Maintain academic Integrity:** As members of a learning community, we all want to submit work that reflects our own ideas and efforts. Even if it is unintentional, plagiarism can have serious consequences. Before you submit each assignment, ask yourself these questions:
 - Did I reference ideas, quotes, phrases, or facts I read about in a book, article, or website, without citing the author and year of the source where I read about them?
 - Did I paraphrase by changing only a word or two or moving the words around?
 - Did you answer “yes” to any of the above questions? If so, you are committing plagiarism and need to give credit to appropriate sources before you submit your assignment
- **Principled Disagreement:** Learning often involves discomfort. Some discomfort can facilitate personal and collective growth. You, your peers, guest lecturers, instructors, and local constituents, have diverse experiences, values, beliefs, affiliations, and identities. Reflecting on these differences can be emotionally challenging, even when it deepens self-awareness and mutual understanding. In this course, we aim to encourage brave spaces where principled disagreement is encouraged rather than avoiding difficult

conversations. *This is challenging work, and we will inevitably make mistakes.* Our goal is to thoughtfully critique ideas rather than attacking individuals. We aim to embrace productive discomfort and minimize unproductive discomfort, striving for principled disagreement.

- **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 brave 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.
- **Our social identities** – Our social identities - race/ethnicity, class, gender, sexual identity, religion, mental and physical ability, size, national origin, citizenship status, and more – shape how we are perceived, represented, and treated. They also influence what knowledge and learning is deemed valuable and legitimate. To challenge hegemonic paradigms and perspectives, this course intentionally includes readings, topics, videos, and assignments from authors and perspectives of diverse backgrounds. However, there may be gaps we have overlooked. Your constructive feedback is always welcome on how to make this course more inclusive and transformative.
- **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:** 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.
- **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*

Module 1: Introduction to Climate Justice and Environmental Legacies

This module explores South Africa's environmental challenges through the lens of climate justice, focusing on how colonialism and apartheid have shaped present-day environmental inequalities. Key concepts include climate justice, environmental justice, political ecology, African environmental philosophy, and the just transition. Cape Town is used as a case study to examine these frameworks in practice and consider pathways toward equitable sustainability.

Required Readings:

- Pulido, L., & De Lara, J. (2018). Reimagining 'justice' in environmental justice: Radical ecologies, decolonial thought, and the Black Radical Tradition. *Environment and Planning E: Nature and Space*, 1(1-2), 76-98.
- Hecht, G. (2023). *Residual governance: How South Africa foretells planetary futures*. Duke University Press. (Introduction: The Racial Contract is Technopolitical)
- Leonard, L. (2018). Bridging social and environmental risks: the potential for an emerging environmental justice framework in South Africa. *Journal of Contemporary African Studies*, 36(1), 23-38.
- Documentary by African Climate Reality Project: [Not On Our Soil - A Climate Justice Reality: Feature Film \(25 mins\)](#)

Module 2: Water Management, Vulnerability, and Resilience

This module uses Cape Town's 2018 water crisis to explore climate vulnerability, urban resilience, and water governance. Students examine the crisis's causes, policy responses, and community efforts, with a focus on equity and access. The module introduces Cape Town's

Water Strategy and innovations like water recycling, greywater use, and water-sensitive urban design. Field activities include visits to water facilities and communities affected by water access challenges.

Required Readings:

- Robins, S. (2019). Hydraulic citizenship and the defence of the commons in a case study of the politics of water and its infrastructures (2017–2018).
- Ziervogel, G. (2019). Unpacking the Cape Town drought: Lessons learned.
- City of Cape Town Climate Change Action Plan, Section 6.2 (SFA 2: Water Security and Drought Readiness).
- City of Johannesburg Climate Action Plan, Section 6.2 (Goal 2: A Climate Resilient City - Water Security).

Module 3: Energy Transitions and the Green Economy

This module explores South Africa's pathway toward a low-carbon future, focusing on the challenges and opportunities of energy transitions. Students examine national and local efforts to achieve carbon neutrality by 2050, including the decarbonization of the electricity sector through municipal generation and large-scale IPP programs. The module also covers renewable energy initiatives such as Small-Scale Embedded Generation (SSEG) and wheeling, energy efficiency in buildings, and sustainable mobility solutions. Emphasis is placed on addressing energy poverty and promoting a green economy through job creation, green skills development, and sustainable procurement.

Required Readings:

- Ramluckun, R., Malumbazo, N., & Ngubevana, L. (2023). A review of the energy policies of the BRICS countries: The possibility of adopting a just energy transition for South Africa. *Sustainability*, 15(7), 5628. <https://doi.org/10.3390/su15075628>
- Todd, I., & McCauley, D. (2021). An inter-disciplinary approach to the energy transition in South Africa. *Discover Sustainability*, 2, 33. <https://doi.org/10.1007/s43621-021-00043-w>
- Cape Town Urban Power Profile.
- City of Cape Town Climate Change Action Plan.

Module 4: Biodiversity Conservation, Ecosystem Services, and Green Infrastructure

This module examines the impacts of climate change on South Africa's biodiversity hotspots and the communities that depend on them. It explores the role of natural ecosystems in buffering climate impacts and the importance of protecting biodiversity. Students also study the

use of urban green infrastructure (GI) in South African cities to regulate heat, reduce the urban heat island effect, and enhance climate resilience. The module addresses barriers to implementing GI and highlights its potential for sustainable urban development.

Required Readings:

- Pasquini, L., & Enqvist, J. (n.d.). Urban green infrastructure in the context of South African cities and for heat regulation.
- City of Cape Town Climate Change Action Plan, Section 6.1 (SFA 1: Urban cooling and heat responsiveness).

Module 5: Urban Planning, Development, and Social Justice

This module explores how urban planning and development strategies in Cape Town and Johannesburg intersect with issues of environmental justice and social equity. Students examine housing, transportation, green space access, and waste management, analyzing how these systems promote or hinder just and sustainable cities. The module highlights Johannesburg's Climate Action Plan, with its focus on vulnerable communities, spatial justice, and sustainable livelihoods. Students also engage with concepts like the circular waste economy and integrating emissions data into urban planning. Field visits in Cape Town provide practical insights into the challenges and innovations shaping resilient urban development.

Required Readings:

- Ogwu, M. C. (2019). Towards Sustainable Development in Africa: The Challenge of Urbanization and Climate Change Adaptation.
- City of Cape Town Climate Change Action
- City of Johannesburg Climate Action Plan

Module 6: Governance, Planning, and Pathways to Transformation

This module explores the governance challenges and opportunities in advancing urban sustainability and climate action. It examines the gap between policy and practice, the city as a learning institution, and the role of tacit knowledge and knowledge co-production. Students engage with transformational agendas, multilevel governance, and implementation barriers. Key focus areas include Cape Town's Cross-Cutting Work Areas (CCWAs), MELR frameworks, and the role of communication, education, and stakeholder engagement in achieving just and inclusive climate transitions. Required Readings:

- Saskia G., Zarina P., & Amy D., (2017) Urban sustainability disjunctures in Cape Town: learning the city from the inside and out, *Local Environment*, 22:sup1, 52-65, DOI: 10.1080/13549839.2016.1223621

- Simon, D., Bellinson, R., & Smit, W. (2022). Transformational climate action at the city scale: comparative South–North perspectives. *Buildings and Cities*, 3(1), pp. 1000–1018. DOI: <https://doi.org/10.5334/bc.244>
- City of Cape Town Climate Change Action Plan
- City of Johannesburg Climate Action Plan

(Note: This syllabus is a framework based on the provided sources. Actual reading lists, assignment details, grading schema, and weekly breakdown would be added by the course instructor.)