

Climate Change and Resilience in Oceania PACI-3020 (3 credits)

Samoa: Social and Environmental Change in Oceania

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

Climate change is a profoundly human issue with human causes and consequences. As the most pressing issue in Oceania, climate change has implications for a variety of sectors in the Pacific Islands and among Pacific Islanders. This course builds on understandings of historical forces and cultural systems in transition in contemporary Samoa and islands in Oceania to evaluate and analyze the relationship between climate and environmental change and social issues. The economic, social, environmental, and cultural impacts of tourism and other aspects of development in small island states are also examined and refracted through the new lens of climate change. Excursions and homestays are integral to this course.

The course is introduced during the first week of orientation in Samoa and is continued throughout the semester. A typical session in this course begins with a lecture followed by a discussion in a wide variety of settings ranging from university lecture halls to geological and archaeological sites, to homestay and villages.

The theme of climate change is woven throughout the seminar, with a special emphasis on the impacts of weather changes, natural disasters, and rising sea levels on Pacific communities. Themes explored in a variety of island nation contexts include, for example, the impacts of climate change and tourism in Samoa's big island; a short visit to Fiji provides first-hand comparisons of development, social and climate change in Oceania; interactions with locals in Fiji provide insights into current social, political, and environmental issues from the perspective of others in the region.

The course provides an opportunity to compare the political, ethnic, environmental, and social issues among Pacific Island nations that are all experiencing climate change and the various challenges and opportunities that it provides. The course has components in Samoa, and Fiji. Lectures and discussions are conducted in cooperation with the National University of Samoa and the University of the South Pacific in Alafua, Samoa with support from additional local professionals.

This syllabus is supplemented by a course handbook which explains expectations for all

assignments in greater detail.

Learning Outcomes

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

- Analyze varying viewpoints and think critically about contemporary issues related to globalization, development, climate change, or a topic of interest facing Samoa and the Pacific;
- Articulate the key impacts and implications of climate change for small islands and describe climate change adaptation and mitigation programs, plans, and policies;
- Participate in talanoa on selected academic readings and contribute evaluative comments in peer learning discussions;
- Keep abreast of current events on a local and regional level and contribute to weekly discussions of current issues;
- Evaluate and think creatively about key political, economic, environmental and social issues in the Pacific and assess the relationship between those issues and climate change;
- Integrate information gathered from primary resources available in Samoa and Fiji with information presented by local Pacific scholars, professionals, and scholarly writings in written assessment tasks.

Language of Instruction

This course is taught in English, but students will be exposed to vocabulary related to course content as well as the nuances of social and environmental change through in-country expert lectures and field visits in a wide range of venues and regional locales.

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.

Assignments and Evaluation

Assignment Descriptions and Grading Criteria

Assessment for the course is based on a variety of tasks and assignments. Assessment tools include:

1) Participation (10%)

This includes active involvement in lectures, readings, discussions, and excursions using the following criteria:

- Attendance - promptness to class and positive presence in class.
- Active Listening - paying attention in class and during field excursions, asking appropriate questions, showing interest and enthusiasm (this includes body language), entertaining contradictory perspectives, taking notes.
- Involvement in Class Discussions - either in small or large groups, sharing knowledge. This means challenging yourself to speak up if you usually don't, and also means allowing others to speak if you are a person who tends to dominate class discussions.
- Group Accountability – positive participation in the group during field excursions and classes; not keeping others waiting.
- Displaying Respect – culturally appropriate interaction with hosts, SIT program staff, SIT lecturers and communities

2) Essay (30%)

Critically assess the causes and effects of environmental change on Pacific Island nations. Incorporate examples of mitigation efforts and contextual approaches to address climate change in Oceania. Use at least 3 scholarly articles to support your ideas and arguments.

3) Metaphor Map (30%)

The climate has always been changing. So why is climate change a concern now? Metaphors can counter misinformation about climate change. Create a metaphor that illustrates your understanding of why climate change is a concern now. The metaphor must be an aid to help with misinformation on climate change as it relates to the Pacific region.

Draw the metaphor.

- It could be stick figures or it could be a diagram that enables you to make sense of or map out the concept at hand.
- Clarity is key.

Write a 500-700 word or type a 2-page explication of your metaphor that interprets it. Explain your metaphor and all its significant features. Be clear about how it relates to your understanding of the situation.

4) PowerPoint Images Critical Essay (30%)

Critically assess the 'vulnerability narrative' as it relates to Climate Change, Environmental Challenges and Resilience in the Pacific. Discuss counter narratives that also exist.

Using 4 photos (that you took) and images you find online create an images essay that describes your understanding of vulnerability and resilience in Climate and Environmental

Change in the Pacific. The photographs could be taken in Fiji and throughout the semester. Images must be properly cited if they are from online sources.

Guided by the various critical thinking skills that enable one to make rational, unbiased, skeptical, and educated evaluations of facts – argue a logical case for your view on ‘vulnerability’ and how it is exemplified in the case of the Pacific with reference to climate change. Add a caption to every photo you use.

- In a 10-minute presentation, talk about your images.
- Your presentation is to explicate the linkages between your critical analysis of vulnerability, the image, and its corresponding caption.
- There should be no more than 7 images in total for your images essay.

Assessment

Participation – 10%

Essay – 30%

Metaphor Map – 30%

PowerPoint Images Critical Essay – 30%

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.
- 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](#), [Disability Services](#), [Counseling Services](#), [Title IX information](#), and [Equity, Diversity, and Inclusion](#) resources.

Course Schedule

A lecture and discussion session is typically 1.5 hours

Module 1: Social, Environmental, and Climate Change (18 hours)

This module looks at how modernization and globalization have impacted small island states through a climate lens.

Session 1: Critical Systems and Concepts

In this session we set the ground rules for engaging in critical issues discussions by defining key concepts and systems of change in Hawai'i, Samoa, and Oceania in general, including globalization, climate change, environment, equity, sustainability, resilience, and development.

Reading:

Sachs, W. (1992). *The Development dictionary: A guide to knowledge as power*. London: Zed Books, 1-52.

Session 2: Climate Change in Oceania

This session provides an overview of Pacific climate and weather and examines potential climate change impacts in a variety of sectors from agriculture to urban development. It touches on key adaptation and mitigation opportunities and properties contributing to climate change resilience.

Reading:

Barnett, J. (2005). 'Titanic states? Impacts and responses to CC in the Pacific Islands', *Journal of International Affairs*, vol 59, issue 1, pp 203-219.

Barnett, J. & Campbell J. (2010). "The Trouble with Climate Change." *Climate Change and Small Island States: Power, Knowledge, and the South Pacific*. London: Earthscan pp 1-17.

Session 3: Climate Change and Human Rights

This session examines the interface between climate change and human rights and re-

conceptualizes climate change as a profoundly human issue with human causes and consequences. It looks at the role of the UN in promoting this agenda.

Readings:

Limon, M. (2009). Human Rights and Climate Change: Constructing a Case for Political Action. Harvard Law Review. Vol 33, pp 439-476.

Slade, N. (2007). Climate Change: The Human Rights Implications for Small Island Developing States 37 *Envtl. Pol'y & L.* 216.

Session 4: Resilience to climate change and Vulnerability in Samoan communities

A lecture that questions the vulnerability narrative through indigenous lenses.

Reading:

Niusulu-Latai, A., Binns, T, Nel, E. (2020). Climate change and community resilience in Samoa. *Singapore Journal of Tropical Geography.*(41) pp 40–60.

Session 5: Tourism and Climate Change

An examination of the interplay between tourism and climate. The tourism sector is highly vulnerable to climate change. Tourism depends on environmental resources while climate defines the length and quality of tourism seasons.

Reading:

Scott, D. (2008). Climate Change and Tourism: Responding to Global Challenges CTO / CRSTDP Regional Workshop, The Bahamas, 18-19 March 2008.

Van der Veecken, Calgaro, Munk Klint, Law, Min Jiang, de Lacy & Dominey-Howes. 2016. Tourism destinations' vulnerability to climate change: Nature-based tourism in Vava'u, the Kingdom of Tonga. *Tourism and Hospitality Research* January 2016 16: 50-71.

Scheyvens, R & Momsen, J. (2008). Tourism in Small Island States: From Vulnerability to Strengths, *Journal of Sustainable Tourism*, 16:5, 491-510.

Session 6: Understanding Aid (1.5 hours)

This session traces the history of aid and its development from donor-oriented aid to partnerships and evaluates the role of aid and Samoa's interaction with aid donors.

Reading:

Alesina, Alberto, and David Dollar. (2000). Who gives foreign aid to whom and why? *Journal of Economic Growth* 5(1): 33-63.

Module Two: Climate Change in Samoa (12 hours)

This module looks at the role environment, natural history, climate change and natural disasters play in the settlement and livelihoods of Pacific Islanders as well as the economic, social, and cultural impacts of tourism in small island states. This module is completed in

conjunction with a weeklong stay in Savaii, Samoa's largest island. Students visit several archaeological and geologic sites including the most recent lava flows (1906). They stay at beach *fales* that continue to face challenges of coastal erosion, sea level rise and climate change. Beach *fales* also represent a more sustainable form of tourism and challenge students to evaluate or reevaluate the role of tourism. Students also evaluate contemporary settlement patterns and livelihoods, adaptations to current environmental challenges and ways in which they are/can be addressed.

Session 1: Climate Change and Environmental Issues in Samoa (1.5 hours)

This session will set the stage for the Savaii excursion. It will help identify major environmental concerns in Samoa and the organizations and initiatives in place to address these issues. It begins to assess the impact of climate change and natural disasters on environment and ways in which Samoa and other Pacific Islands are adapting to climate change.

Reading:

Cherrington, M. (2008). Indigenous peoples and climate change; Guardians. *Cultural Survival Quarterly: Climate change and indigenous peoples*. Summer 32 (2): 10-15.

Session 2: Vulnerability and Resilience (1.5-hour peer learning discussion)

Pacific islands and their inhabitants, are not essentially or inherently vulnerable. They were traditionally sites of resilience. Colonialism, development, and globalization have set in place processes by which the resilience has been reduced and exposure increased. This discussion examines factors relating to vulnerability and resilience and gives insight into Pacific voices.

Readings:

Campbell, J.R, (2009). "Islandness: Vulnerability and resilience in Oceania", *Shima: The international Journal of Research into Island Cultures*, vol 3, issue 1: 85-97.

Paton, Kathryn and Fairbairn-Dunlop, Peggy. (2010). 'Listening to local voices: Tuvaluans respond to climate change', *Local Environment*, 15: 7, 687 — 698.

Session 3; Climate change solutions & urban wellbeing in the Pacific

This session looks at the impact of urbanization on Pacific communities through a geographical lens. It looks at green solutions for increasingly urbanized spaces and interrogates traditional knowledge in increasing modernization through architecture.

Reading:

Godfrey Baldacchino, (2018) "Seizing history: development and non-climate change in Small Island Developing States", *International Journal of Climate Change Strategies and Management*, Vol. 10 Issue: 2, pp.217-228, <https://doi.org/10.1108/IJCCSM-02-2017-0037>

Session 4: Geology in Samoa (2.5 hours)

This session consists of a lecture and mini on-site lectures by a resident geologist who reviews the role of plate tectonics and formation of volcanic island chains. It discusses the formation of volcanic islands in contrast to atolls and compares their structures. Recent volcanism in Samoa is discussed before a visit is made to some of the most recent lava flows in Samoa.

Reading:

Jopling, W. (2014). Samoa: A Geologic History. Apia: Samoa Tourist Authority.

Activity: Examine human and natural environmental impacts on volcanic lava fields at the Saleaula Lava flows and ruins (1906-1911).

Session 5: Climate Change Seminar organized by SPREP, Secretariat of the Pacific Regional Environment Program (2.5 hours)

This seminar will begin with a look at myths and realities of climate change and allow students to contribute and build on their knowledge of climate change. Papers will be presented on climate change and weather, climate change finance, climate change and traditional knowledge and the Pacific Climate Change Portal.

Resource: <https://www.pacificclimatechange.net>

Session 6: Climate Change Adaptation (CCA) in Samoa (1.5 hours)

This session done in conjunction with the MNRE (Ministry of Natural Resources and Environment) and SUNGO (Samoa Umbrella for Non-Governmental Organizations) will look at adaptation project sites.

Reading:

Smit B, Wandel J. (2006). Adaptation, adaptive capacity and vulnerability. Global Environ Change 16: 282–292.

Session 7: Pollution and Waste Management and the Mangroves project (2 hours)

This session looks at the intersection of increased urbanisation and the waste management problems faced in small Pacific islands. The visit to the mangroves is to learn about traditional habitats and the role indigenous knowledge contributes to waste management.

Session 8: Mainstreaming Disaster and Climate Change Resilience (1.5 hours)

This session examines the 8th Strategy for the Development of Samoa and its vision to mainstream climate change into the 14 key outcomes of the plan. It will also look at the building the capacity of sectors to mainstream and implement disaster relief management and climate change

Reading:

Strategy for the Development of Samoa 2016-2020.

http://www.mof.gov.ws/Portals/195/EPPD/SDS%201617-1920_Eng.pdf

Session 9: Falese'ela Environment Protection Programme (3 hours)

Lecture on the role of communities in the Protection of the Environment.

Activity: Examine the impact of Climate Change on local communities and participate in reforestation and conservation efforts

Session 10: The biodiversity and ecosystems of tropical rainforests: change, conservation, sustainability and the environment (2 hours)

A session on natural ecosystems and biodiversity in Samoa and a hike through the rainforest of Mt Vaea.

Module Three: Climate and Environmental Change in Fiji (15 hours)

This module looks at contemporary issues in independent Samoa and an 11-day excursion to Fiji. Village visits and development partners visits will allow for a deeper understanding of the impact of Climate Change elsewhere in the Pacific.

Session 1: Human Responses to Climate Change around AD 1300: A Case Study of the Sigatoka Valley

Session on the impact of human settlement on the natural environment.

Reading:

Kumar, R. Nunn, P. Field, J. S. De Biran, A. (2006). Human responses to climate change around AD 1300: A case study of the Sigatoka Valley, Viti Levu Island, Fiji. *Quaternary International*, 151. Issue 1. Pp. 133-143.

Session 2: Eco-Theology, Resettlement, & Climate Change

Lecture on eco-theological responses to climate change in Oceania

Reading:

Rubow, C. and Bird, C. (2016). Eco-theological Responses to Climate Change in Oceania. *Worldviews*. 20 (2), pp. 150-168.

Session 3: Visit to the Pacific Conference of Churches

Session on the work of the Ecumenical movement of churches in the Pacific and the relocation of the people of Vunidogaloa in Fiji.

Session 4: Islands biodiversity, Atoll Resilience & Adaptation

Lecture on small Pacific islands, their knowledge systems and valuable insights on seasonal cycles, ecological processes, and the management of biocultural diversity that are relevant at a broad scale for understanding resilience and adaptability to the social-ecological effects of climate change.

Reading:

McMillen, H. L., T. Ticktin, A. Friedlander, S. D. Jupiter, R. Thaman, J. Campbell, J. Veitayaki, T. Giambelluca, S. Nihmei, E. Rupeni, L. Apis-Overhoff, W. Aalbersberg, and D. F. Orcherton. 2014. Small islands, valuable insights: systems of customary resource use and resilience to climate change in the Pacific. *Ecology and Society* 19(4): 44.

Session 5: Social Justice and Climate Change

Climate induced migration and the case of Tuvaluans.

Reading:

Farbotko, C. and Lazrus, H. (2012). The first climate refugees? Contesting global narratives of climate change in Tuvalu. *Global Environmental Change*. 22. Issue 2. pp 382 – 390.

Session 6: Climate Change and Ocean Issues in the Pacific Islands

Lecture on the reality of our changed oceans during Climate Change.

Reading:

Veitayaki, J. (2018). Ocean in us: security of life in the world's largest ocean. *Pacific Studies*. 41: 1-27.

Session 7: Marine Ecosystems: Challenges & Sustainability in Climate Change (Prof Joeli)

Impact of climate change on Fiji communities and the sustainable practices.

Reading:

Veitayaki, J and Holland, E. (2018). Lessons from Lomani Gau Project, Fiji : a local community's response to climate change. in *Pacific climate cultures : living climate change in Oceania*. Crook, T and Rudiak-Gould, P. (eds.). De Gruyter: Berlin.

Session 8: Serua village visit

Visit to the village of Serua. Learn from the community of Serua about traditional knowledge and the resistance to climate change induced resettlement.