

Carleton University
Winter 2021

GINS 4090-F: Climate Resilient Development
Kroeger College of Public Affairs
Bachelor of Global and International Studies

Mondays 11:35am-2:25pm (Online, Blended learning format)

Instructor: Blane Harvey

Office Hours: Mondays, 3:30pm-4:30pm or by appointment

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Course overview:

The starting point for this seminar is the need to transform development research and practice in line with the uncertain socio-environmental futures that climate change presents us. More than a technical problem that can be resolved with targeted interventions or ‘green’ innovations, the climate crisis intersects with deeply entrenched development challenges like poverty and inequality in ways that are becoming increasingly obvious as its impacts begin to be felt. We will first critically examine the theoretical basis for this assertion, and the need for reorienting development research and practice towards approaches grounded in complexity, collaboration and a systems orientation.

We will consider how the politics of the global development project may enable or constrain this type of transformation, and explore how community-led, indigenous and popular movements may offer compelling alternatives. We will also explore what such a transformation might look like in practice, through a hands-on exploration of models of knowledge co-production, social learning and deliberation, and process facilitation. In so doing, we will seek to balance theory and practice, embedding these in a critical awareness of the barriers and drivers of transitions toward more climate resilient development pathways.

Course objectives:

- Develop a strong understanding of the drivers of the climate crisis, and the implications of this crisis on development in the Global South;
- Develop a strong understanding of how climate change intersects and interacts with other development challenges;
- Ground this understanding in a detailed exploration of a national case setting;
- Explore how the complex and intersectional nature of climate change call for a rethinking of development research, policy, and practice;
- Develop and present a vision and plan of action that might respond appropriately to current and future climate impacts in a national case setting.

Course Format:

The class will be held exclusively online. We will use a blended format of teaching and learning, consisting of asynchronous (pre-recorded) lectures; synchronous online dialogues and presentations, guest speakers and interactive exercises; as well as independent study. While we have 3 hours allocated for weekly class meetings, we will aim to keep these synchronous meetings shorter, with the expectation that students will spend additional time engaging asynchronously with course content. Online meetings will take place via the Zoom platform, while asynchronous activities (including assignment submissions) will take place via CU Learn. Specific details will be presented and reviewed collectively at the first class of the semester to ensure that all students are clear and in agreement with the format.

Assessment Methods:

1. Attendance & Participation: 10%
2. Co-facilitation of a seminar discussion: 15%
3. Critical Reading responses x 3 (15%)

4. Country case study: Understanding impacts of climate change: 20%
5. Final project – Country action plan: 40%

Note: Detailed grading rubrics will be provided for each of these assignments.
All assignments must be submitted via cuLearn.

- **Attendance & Participation: 10%**

Due date: Ongoing

Attendance at each course session is mandatory, and full participation expected, unless arranged with the lecturer in advance. I understand that the current pandemic is creating challenging circumstances for all of us, and may affect your capacity to participate at times. Should you require accommodations in this regard, I would ask that you communicate this request in advance so that we can agree on how these should be addressed. This grade will be based on your ongoing participation in class, demonstrating that you have read the assigned readings and engaged with the issues being discussed.

- **Co-facilitation of a seminar discussion: 15%**

Due date: As scheduled

We will have weekly discussions led by groups of 2-3 students. Group formation and topic selection will occur on the first class of the semester. On the appointed week, the group will lead an in-depth exploration of a specific aspect or element of the assigned readings that they found particularly significant. This should include doing further exploration of the selected issue, drawing on the supplementary readings or additional research of their own. Note, this should not be a summary of the assigned readings or the overall topic for the week except to briefly introduce the specific issue that the group has chosen to focus on. In preparing for their facilitation session, students should assume that their peers have done the assigned readings and can use those as a point of departure.

On their assigned date, groups will have a total of 30 minutes to lead the class through a brief presentation and of the topic that they identified (10-15 minutes), and to facilitate class interaction around the topic (15-20 minutes). This is not limited to a “presentation, then plenary discussion” format. You are encouraged to think creatively about how best to engage the class with the topic you’ve selected and may use tools or resources that support the discussion as you feel is appropriate.

For example: A group that is leading a discussion on “Climate impacts and responses: An equity and justice perspective” (Feb. 15th) may find the concept of atmospheric commons significant and wish to explore that in greater depth. They would do some additional reading on the issue, then prepare the substance for a brief dialogue or interactive activity on this issue to spark discussion among the rest of the class members.

After leading the discussion each group should submit a brief summary (maximum 2 pages), highlighting:

- The topic selected and reason for its selection.
- A summary of the discussion that occurred and any key messages that emerged.
- Links or references to any additional resources that were shared and/or used.
- A brief description of how each member contributed to the preparation

- **Critical Reading responses x 3 (15%)**

Due date: According to selected readings

Each student will submit three brief critical responses to an assigned reading of their choice. The responses should be 300-500 words in length and contain a brief statement on *why* you selected the reading in question, a critical engagement with one or more of the authors’ key claims or arguments, and a probing question that emerges from the reading for you. Alternatively, these can be submitted as audio or video reflections of approximately 5 minutes in length. These should be submitted the week of the assigned reading. At least one response should be submitted before the Winter study break.

NOTE: You may not submit a response for the reading(s) you are using for the seminar discussion you are facilitating (above).

- **Country case study– Understanding impacts of climate change: 20%**

Due Date: Feb. 19th

While the drivers of climate change are global in nature, its impacts and appropriate responses are deeply contextual. To explore this important reality, you will select a country for focus with one or two classmates over the course of the semester (groups of 2-3). In this first part of the study, you will investigate the projected impacts of climate change on the country in question, and examine the possible implications of these impacts on one other national development goal. We will use the UN Sustainable Development Goals as a guiding framework for this. Your case study should explore the following themes:

- A) Brief country overview (location; population; etc.)
- B) Key vulnerabilities, including people, places, and livelihoods.
- C) Current and projected impacts: a summary of some of the current and projected impacts of climate change under high and lower-emissions scenarios.
- D) Detailed examination of vulnerabilities and projected impacts in relation to the selected development goal (e.g. poverty; hunger; water; energy; inequality). This should highlight specific national circumstances, not simply global insights.

This can be presented as either an academic poster; or as a briefing note of up to 4 pages. Guidance will be provided for each of these. The case study should demonstrate the use of robust and up-to-date sources of information, and make effective use of visual supports. These will be shared with other members of the class via cuLearn.

- **Final project – Country action plan: 40%**

Due date: April 12th

Building on the country case study, the final project for the course moves from understanding the projected impacts of climate change to proposing a plan for action that takes into account national circumstances, key development challenges, and considerations that have been explored over the course of the semester. Each student must develop their own country action plan, but you are encouraged to consult with your group members from the country case study on your work in progress. Your country action plan should be 4,000-5,000 words in length and should draw directly on concepts and issues explored through our course materials, as well as on your independent research. The plan should:

- A) Identify a critical ‘climate and development’ challenge that the country is facing;
- B) Provide a detailed exploration of why this challenge is of particular importance for the country, both from the perspective of climate impacts and development pathways.
- C) Critically examine how the country has addressed this issue to date, weighing both the strengths and weaknesses of the existing policies, practices or mechanisms that have been put into place.
- D) Propose an alternative form of action for addressing this challenge, describing – for example - who would be involved, why this plan of action is appropriate, how equity and justice concerns are attended to through this plan, and what kinds of benefits it might have for specific groups within the country. This should include a description of who would need to lead this work, and what conditions for success would need to be in place.

You will have the opportunity to share these action plan with peers in a conference-style, end-of-term presentation.

Late Policy: Unless agreed in writing in advance, assignments are due on the dates and in the format specified in the course outline. Late submissions will be subject to a penalty 5% per day including weekends. Assignments will not be accepted 10 days after the due date. Exceptions will be made only in those cases of special circumstances, (e.g. illness, bereavement) and where the student has verifiable documentation.

Proposed Course Summary:

****NOTE: Readings, order of sessions and list of guest speakers are subject to review and revision by all class members ****

Week	Date	Topic	Required Readings
<i>Part 1: Climate resilient development: definitions and debates</i>			
1	Jan 11	<ul style="list-style-type: none"> • Course overview and introduction • Forming project groups and selecting topics for seminar discussions 	Tanner & Horn-Phathanothai 2014
2	Jan 18	Climate and development: An introduction	Tanner & Horn-Phathanothai 2014 Erikson et al. 2014
3	Jan 25	Climate change – Understanding the scientific basis	Emanuel 2019; Hulme 2009; Hulme 2020
4	Feb 1	Policy responses: The international agenda	Cicero 2012/2020; Carbon Brief 2017; Dazé et al. 2018 ; UNEP 2020
5	Feb 8	Policy responses: From the national to the local	Ensor et al 2014; McGray et al 2007; Hammill 2020
6	Feb 15	Climate impacts and responses: An equity and justice perspective	Lammy 2020; Pelling & Garschagen 2019; Robinson & Shine 2018; Tanner & Harvey 2013
7	Feb 22	Winter break – No class	
8	Mar 1	Climate action from below	Caniglia et al. 2015; Nunez 2018; Hayward 2021
9	Mar 8	From technicism to transformation: Reframing climate responses	Nightingale et al. 2020; O'Brien & Selboe 2015
<i>Part 2 : Integrating climate change into development practice</i>			
10	Mar 15	Knowledge and action	Bradbury et al. 2019; National Academy of Sciences panel “Linking Knowledge to Action” 2020
11	Mar 22	Collaborating and learning across boundaries	Cundill et al. 2019; Irwin et al. 2018 Fisher & Harvey, 2019
12	Mar 29	Transforming leadership	Bateman & Mann 2016; Ferdig 2007; Senge et al 2015
13	April 5	Transforming development programs and action	Cundill et al. 2019; Jones et al 2018
14	April 12	<i>Final Presentations</i>	

Complete Bibliography:

Week 1: Course overview

Tanner, T. and Horn-Phathanothai, L. (2014) Chapter 2: The climate-development nexus. In *Climate change and development* (pp. 46-86). Routledge. [optional]

Week 2: Climate and development: An introduction

- *Required readings/viewing:*

Tanner, T. and Horn-Phathanothai, L. (2014) Chapter 2: The climate-development nexus. In: *Climate change and development* (pp. 46-86). Routledge.

Eriksen, S., Inderberg, T. H., O'Brien, K., & Sygna, L. (2014). Introduction: development as usual is not enough. In *Climate Change Adaptation and Development* (pp. 17-34). Routledge.

Raworth, K. (2018). A healthy economy should be designed to thrive, not grow.

<https://youtu.be/Rhcrbcg8HBw>

- *Supplementary materials:*

Adger, W. N., Huq, S., Brown, K., Conway, D., & Hulme, M. (2003). Adaptation to climate change in the developing world. *Progress in development studies*, 3(3), 179-195.

Raworth, K. (2017). *Doughnut economics: seven ways to think like a 21st-century economist*. Chelsea Green Publishing.

Schipper, E.L.F., Tanner, T., Dube, O. P., Adams, K. M., & Huq, S. (2020). The debate: Is global development adapting to climate change?. *World Development Perspectives*, 100205.

Tanner, T., Lewis, D., Wrathall, D., Bronen, R., Cradock-Henry, N., Huq, S., ... & Alaniz, R. (2015). Livelihood resilience in the face of climate change. *Nature Climate Change*, 5(1), 23-26.

Week 3: Climate change: Understanding the scientific basis

- *Required readings:*

Emanuel, K. (2019) [Climate Science and Climate Risk](#). MIT. (note, you may use the PDF version or the online website, which contains additional resources)

Hulme, M. (2009) Chapter 3: The performance of science. In *Why we disagree about climate change* (pp. 72-108). Cambridge University Press.

Hulme, M., Lidskog, R., White, J. M., & Standring, A. (2020). Social scientific knowledge in times of crisis: What climate change can learn from coronavirus (and vice versa). *Wiley Interdisciplinary Reviews. Climate Change*, 11, e656 (pp1-5).

- *Supplementary materials:*

IPCC (2018). Summary for Policymakers. In: *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. <https://www.ipcc.ch/sr15/chapter/spm/>

Kofman, A. (2018). Bruno Latour, the post-truth philosopher, mounts a defense of science. *The New York Times Magazine*, 25. <https://www.nytimes.com/2018/10/25/magazine/bruno-latour-post-truth-philosopher-science.html>

Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., ... & Folke, C. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347 (6223).

Week 4: Policy responses: The international agenda

- *Required readings/viewings:*

Cicero (2012). The History of Climate Change Negotiations in 83 seconds. <https://youtu.be/B11kASPfYxY>

Cicero (2020). The Paris Agreement in 97 seconds. <https://youtu.be/qfAeoBGS3Ek>

Carbon Brief (2017). Explainer: Dealing with the ‘loss and damage’ caused by climate change. <https://www.carbonbrief.org/explainer-dealing-with-the-loss-and-damage-caused-by-climate-change>

Dazé, A., Terton, A., Maas, M. (2018). Alignment to Advance Climate-Resilient Development. <https://www.iisd.org/publications/alignment-advance-climate-resilient-development-overview-brief-1-introduction>

United Nations Environment Programme (2020). *Emissions Gap Report 2020 - Executive summary*. Nairobi.

- *Supplementary Readings:*

Hickel, J., & Kallis, G. (2020). Is green growth possible?. *New Political Economy*, 25(4), 469-486.

Huq, S., Mahid, Y., & Suliman, N. (2018). Evolution of Climate Change Adaptation Policy and Negotiation. In *Resilience* (pp. 63-75). Elsevier.

Murphy, S. P. (2018). Global political processes and the Paris Agreement. *Routledge Handbook of Climate Justice*, 71.

Seo, S. N. (2017). Chapter 7: Negotiating a Global Public Good: Lessons From Global Warming Conferences and Future Directions. In *The behavioral economics of climate change: adaptation behaviors, global public goods, breakthrough technologies, and policy-making* (pp. 223-256). Academic Press.

Week 5: Policy Responses: From the national to the local

- *Required readings:*

Ensor, J., Boyd, E., Juhola, S., & Broto, V. C. (2014). Building adaptive capacity in the informal settlements of Maputo. *Climate change adaptation and development: Transforming paradigms and practices*, 19.

Hammill, A. (2020) Resilient Recovery: Using Climate Adaptation Plans to Build Back Better. <https://napglobalnetwork.org/2020/05/resilient-recovery-using-climate-adaptation-plans-to-build-back-better/>

McGray, H., Hammill, A., Bradley, R., Schipper, L., & Parry, J. E. (2007). *Weathering the storm: options for framing adaptation and development* (p. 57). Washington, DC: World Resources Institute.

- *Supplementary readings*

Aylett, A. (2010). Participatory planning, justice, and climate change in Durban, South Africa. *Environment and Planning A*, 42(1), 99-115.

Dodman, D., & Mitlin, D. (2015). The national and local politics of climate change adaptation in Zimbabwe. *Climate and Development*, 7(3), 223-234.

Khan, M. R., & Roberts, J. T. (2013). Adaptation and international climate policy. *Wiley Interdisciplinary Reviews: Climate Change*, 4(3), 171-189.

Mfitumukiza, D. et al. (2020). Scaling local and community-based adaptation. *Global Commission on Adaptation*. https://cdn.gca.org/assets/2020-06/Local_Adaptation_Paper_-_Global_Commission_on_Adaptation.pdf

Week 6: Climate impacts and responses: An equity and justice perspective

- *Required reading/viewing:*

Lammy, D. (2020). Climate justice can't happen without racial justice. <https://youtu.be/EkIpeO1r0NI>

Pelling, M., & Garschagen, M. (2019). Put equity first in climate adaptation. *Nature*, 569, 327-329

Robinson, M., & Shine, T. (2018). Achieving a climate justice pathway to 1.5 C. *Nature Climate Change*, 8(7), 564.

Tanner, T., & Harvey, B. (2013). Social justice and low carbon development. *Low carbon development: Key issues*, 55-65.

- *Supplementary Readings:*

Harlan, S. L., Pellow, D. N., Roberts, J. T., Bell, S. E., Holt, W. G., & Nagel, J. (2015). Climate justice and inequality. *Climate change and society: Sociological perspectives*, 127-163.

Khan, M., Robinson, S. A., Weikmans, R., Ciplet, D., & Roberts, J. T. (2020). Twenty-five years of adaptation finance through a climate justice lens. *Climatic Change*, 161(2), 251-269.

Polack, E. (2008). A Right to Adaptation: Securing the Participation of Marginalised Groups. *IDS Bulletin*, 39(4).

Shackleton, S., Ziervogel, G., Sallu, S., Gill, T., & Tschakert, P. (2015). Why is socially-just climate change adaptation in sub-Saharan Africa so challenging? A review of barriers identified from empirical cases. *Wiley Interdisciplinary Reviews: Climate Change*, 6(3), 321-344.

Week 7: Reading week – No class

Week 8: Climate Action from Below

- *Required readings:*

Caniglia, B. S., Brulle, R. J., & Szasz, A. (2015). Civil society, social movements, and climate change. *Climate change and society: Sociological perspectives*, 1, 235-268.

Hayward, B (2021). Chapter 4: Social Agency: Learning how to make a difference with others. In *Children, Citizen and Environment #SchoolStrike Edition*. Routledge.

Núñez, A. J. (2018). Mother Earth and climate justice. *Routledge Handbook of Climate Justice*, 420.

- *Supplementary Readings/viewing:*
Quinn-Thibodeau, T., Wu, B. NGOs and the Climate Justice Movement in the Age of Trumpism. *Development* 59, 251–256 (2016). <https://doi.org/10.1057/s41301-017-0091-z>

Washington Post (2020). Beyond Greta Thunberg: The uprising of youth climate activists. https://www.youtube.com/watch?v=KoC_1rOAFX0

Whyte, K.P. (2020). Chapter 20: Indigenous environmental justice: Anti-colonial action through kinship. In *Environmental Justice*. Taylor & Francis

Week 9: From technicism to transformation: Reframing climate responses

- *Required readings:*
Nightingale, A. J., Eriksen, S., Taylor, M., Forsyth, T., Pelling, M., Newsham, A., ... & Bezner Kerr, R. (2020). Beyond Technical Fixes: climate solutions and the great derangement. *Climate and Development*, 12(4), 343-352.

O'Brien, K., & Selboe, E. (2015). Climate change as an adaptive challenge. In *The adaptive challenge of climate change*, 1-23.

- *Supplementary readings:*
Fischer, J., & Riechers, M. (2019). A leverage points perspective on sustainability. *People and Nature*, 1(1), 115-120.
O'Brien, K., Eriksen, S., Inderberg, T. H., & Sygna, L. (2014). Climate Change and development. *Climate change adaptation and development: Transforming paradigms and practices*, 273.

Pelling, M., O'Brien, K., & Matyas, D. (2015). Adaptation and transformation. *Climatic Change*, 133(1), 113-127.

Week 10: Knowledge and action

- *Required readings/viewing:*
Bradbury, H., Waddell, S., O'Brien, K., Apgar, M., Teehankee, B., & Fazey, I. (2019). A call to Action Research for Transformations: The times demand it. *Action Research*, 17(1), 3-10.

Liverman, D. et al. (2020) Panel V: Linking Knowledge with Action. Panel session in the *Progress, Challenges, and Opportunities for Sustainability Science Workshop*. Online workshop. ** Note: This is a panel featuring Diana Liverman; Sarah Burch; Meaghan Daly; Maria Carmen Lemos; Esther Turnout; and Lorrae Van Kerkhoff. Please watch the full set.

<https://vimeo.com/showcase/7902048/video/489934217>

- *Supplementary readings:*
Harvey, B., Cochrane, L., & Van Epp, M. (2019). Charting knowledge co-production pathways in climate and development. *Environmental Policy and Governance*, 29(2), 107-117.

Mach, K. J., Lemos, M. C., Meadow, A. M., Wyborn, C., Klenk, N., Arnott, J. C., ... & Stults, M. (2020). Actionable knowledge and the art of engagement. *Current Opinion in Environmental Sustainability*, 42, 30-37.

Norström, A. V., Cvitanovic, C., Löf, M. F., West, S., Wyborn, C., Balvanera, P., ... & Campbell, B. M. (2020). Principles for knowledge co-production in sustainability research. *Nature sustainability*, 1-9.

Turnhout, E., Metz, T., Wyborn, C., Klenk, N., & Louder, E. (2020). The politics of co-production: participation, power, and transformation. *Current Opinion in Environmental Sustainability*, 42, 15-21

Week 11: Collaborating and learning across boundaries

- *Required readings:*

Cundill, G., Harvey, B., Tebboth, M., Cochrane, L., Currie-Alder, B., Vincent, K., ... & New, M. (2019). Large-scale transdisciplinary collaboration for adaptation research: Challenges and insights. *Global Challenges*, 3(4), 1700132.

Fisher, C. & Harvey, B. (2019). Facilitating peer learning with adaptation policymakers: Approaches and insights from the NAP Global Network's Targeted Topics Forums. Winnipeg, International Institute for Sustainable Development. Available online at:

<http://napglobalnetwork.org/resource/facilitating-peer-learning-with-adaptation-policy-makers/>

Irwin, E. G., Culligan, P. J., Fischer-Kowalski, M., Law, K. L., Murtugudde, R., & Pfirman, S. (2018). Bridging barriers to advance global sustainability. *Nature Sustainability*, 1(7), 324-326.

- *Supplementary readings:*

Cundill, G. & Harvey, B. (2019). Unpacking the potential role of social learning in adaptation policy. In E.C.H. Keskitalo & B. Preston (Eds.) *Research Handbook on Climate Change Adaptation Policy*, Cheltenham, Edward Elgar Publishing.

Ensor, J., & Harvey, B. (2015). Social learning and climate change adaptation: evidence for international development practice. *Wiley Interdisciplinary Reviews: Climate Change*, 6(5), 509-522

Freeth, R., Clarke, E. A., & Fam, D. (2019). Engaging creatively with tension in collaborative research. In: *Independent Thinking in an Uncertain World: A Mind of One's Own*, 262.

Koelle, B., Scodanibbio, L., Vincent, K., Harvey, B., van Aalst, M., Rigg, S., Ward, N. and Curl, M. (2019) A Guide to Effective Collaboration and Learning in Consortia. London, Red Cross Red Crescent Climate Centre.

<https://www.climatecentre.org/downloads/files/Learning%20in%20Consortia%20Guide%20A4%20FINAL%20screen%208.pdf>

Lonsdale, K. and Goldthorpe, M. 2012. Collaborative research for a changing climate: Learning from researchers and stakeholders in the ARCC programme. Adaptation and Resilience in a Changing Climate Coordination Network, UKCIP, Oxford.

Week 12: Transforming Leadership

- *Required readings:*

Bateman, T. S., & Mann, M. E. (2016). The supply of climate leaders must grow. *Nature Climate Change*, 6(12), 1052-1054.

Ferdig, M. A. (2007). Sustainability leadership: Co-creating a sustainable future. *Journal of Change Management*, 7(1), 25-35.

Senge, P., Hamilton, H., & Kania, J. (2015). The dawn of system leadership. *Stanford Social Innovation Review*, 13(1), 27-33.

- *Supplementary Readings:*

de Águeda Corneloup, I., & Mol, A. P. (2014). Small island developing states and international climate change negotiations: the power of moral “leadership”. *International Environmental Agreements: Politics, Law and Economics*, 14(3), 281-297.

Nagendra, H. (2018). The global south is rich in sustainability lessons that students deserve to hear. *Nature*, 557. 485-488.

Week 13: Transforming development programs and action

- *Required readings*

Cundill, G., Currie-Alder, B., & Leone, M. (2019). The future is collaborative. *Nature Climate Change*, 9(5), 343-345.

Jones, L., Harvey, B., Cochrane, L., Cantin, B., Conway, D., Cornforth, R., De Souza, K., & Kirbyshire, A. (2018) Designing the next generation of climate adaptation research for development. *Regional Environmental Change* 18(1), 297-304. doi: 10.1007/s10113-017-1254-x

- *Supplementary readings*

Harvey, B., Pasanen, T., Pollard, A., & Raybould, J. (2017). Fostering learning in large programmes and portfolios: emerging lessons from climate change and sustainable development. *Sustainability*, 9(2), 315.

CARIAA (2018). Novel insights brief: Research for Impact. <http://hdl.handle.net/10625/57289>

Academic accommodations:

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the [Student Guide](#)

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details see the [Student Guide](#)

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the [PMC website](#) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Plagiarism:

The University Senate defines plagiarism as “presenting, whether intentional or not, the ideas, expression of ideas or work of others as one’s own.” This can include:

- reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings;
- failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs.

Plagiarism is a serious offence which cannot be resolved directly with the course’s instructor. The Associate Deans of the Faculty conduct a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They may include a mark of zero for the plagiarized work or a final grade of "F" for the course.

Intellectual Property: Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

Submission and Return of Term Work: Papers must be submitted directly to the instructor according to the instructions in the course outline. Arrangements for late submission of term work is to be determined by your instructor. Final exams are intended solely for the purpose of evaluation and will not be returned.

Grading: Standing in a course is determined by the course instructor, subject to the approval of the faculty Dean. Final standing in courses will be shown by alphabetical grades. The system of grades used, with corresponding grade points is:

Percentage	Letter grade	12-point scale	Percentage	Letter grade	12-point scale
90-100	A+	12	67-69	C+	6
85-89	A	11	63-66	C	5
80-84	A-	10	60-62	C-	4
77-79	B+	9	57-59	D+	3
73-76	B	8	53-56	D	2
70-72	B-	7	50-52	D-	1

Approval of final grades: Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by an instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Carleton E-mail Accounts: All email communication to students from BGINs will be via official Carleton university e-mail accounts and/or cuLearn. As important course and University information is distributed this way, it is the student’s responsibility to monitor their Carleton and cuLearn accounts.

Official Course Outline: The course outline posted to the BGINs website is the official course outline.