



COURSE OUTLINE

GEOG 491: Geographies of Waste



Binners, Canners and Diverters in North America



Waste Pickers working at COOPCENT, Brasilia

Email: gutber@uvic.ca

Lectures: CLE A216 Tuesday 14:30-17:20

Office Hours: Tuesday 11:30 to 12:30

Please insert GEOG491 under subject in your Email communication!

Course Description

Waste has become one of the greatest challenges to civilization and a critical, highly complex and transversal topic, pervading everyday life in unprecedented ways. Studying waste allows us to draw connections to key societal issues ranging from environmental degradation and climate change to poverty and justice, policy, community development or the SDGs. Applying a Social Sciences lens to waste allows for cross examination of geographic, cultural, social, economic, political and environmental aspects and processes related to generation, discard, management and avoidance of waste. In this course we study significant differences and similarities in waste management among cities and regions throughout the globe. We examine the spatial, technical, and social aspects of the garbage problem in a geographic context. International development perspectives are compared and contrasted throughout the course. Waste issues due to perceived and real environmental impacts of waste technologies, especially incineration and sanitary landfill will be examined. We will gain a better understanding of the challenges and solutions attached to waste and learn about the social significance of waste. Basic concepts such as waste systems, waste streams and waste regimes will be introduced and applied to a geographic lens. This course provides hands-on learning and is highly relevant to contentious urban planning and governance issues, to sustainability as well as livelihoods and climate change questions. Guest speakers from

the field will contribute to the practical and theoretical significance of waste studies. This course is particularly relevant to students from Social Sciences, Environmental Studies and Engineering.

Course Objectives

The course aims at providing students with the skills to examine different operations of a municipal waste management system, touching on physical, financial, social, institutional and governance aspects in specific geographic contexts. Students will develop some of the tools required to study waste governance, and explore how research can inform policy and practice. A key objective is for students to develop critical thinking skills and complex analysis. Students will prepare a literature review and will contribute to the content and delivery of course topics. The course should help develop key professional skills, including communication of ideas, principles and theories using a variety of formats and skills related to group seminar tasks and discussions.

Learning Outcomes

Course Objectives	Learning Outcome	Assessment Criteria
Communicate effectively.	Produce written material.	Produce written material that effectively communicates complex issues. Correct use of spelling, punctuation, sentence and paragraph construction. Correct use of citations and reference material.
	Produce oral presentations.	Present your findings in an effective and engaging way
	Take part in class discussions	In class and online.
Critical thinking and Analysis.	Creatively analyze and interpret issue scenarios and propose solutions.	Be able to determine principal features of a situation. Analyze possible implications for each case study. Discuss the pros and cons of solutions.
Knowledge on waste management and waste related issues.	Familiarity with local, provincial, national and global scales and problem contexts.	Determine principal features of waste management and waste governance. Recognize and describe global and historical context for barriers and solutions. Propose individual and integrated solutions.

By the end of the course, students should be able to:

- Understand and explain how different wastes are generated by various sectors, in a local as well as global context.
- Be able to explain and assess the components of a local waste management system (e.g., collection, transport, treatment, disposal and prevention).
- Discuss the financial, social, regulatory and environmental aspects of local waste management; and how local waste management is impacted by governance approaches.
- Question the transition from traditional waste management to a resource value approach, which focuses on social inclusion and circular economy.
- Understand the links between waste management and climate change, global environmental change and the Sustainable Development Goals (SDGs).

Course Overview

Week	Dates	LECTURE TOPICS
2	12.09.	Introduction to the course and course work: Different scales and diverse perceptions and approaches to waste
3	19.09.	Waste governance: Theories, concepts and research methodologies (UPE, urban metabolism, waste regime, sustainable livelihoods approach, PAR, CBR)
4	26.09. ^{1 2 3}	Fieldtrip
5	3.10.	Waste pickers and waste workers (Social, environmental, economic, occupational health issues)
6	10.10.	Local waste systems in the global South and the global North (e.g., collection, transport, treatment, disposal, prevention, policies)
7	17.10. ⁴	Electric and electronic waste
8	24.10.	Plastic waste (packaging waste, beauty waste, fast fashion, microplastics)
9	31.10. ⁵	Organic waste
10	7.11.	Textile waste
11	14.11.	Reading Break
12	21.11	Waste, the environment and climate change (Greenhouse gas emissions, climate justice)
13	28.11.	Zero Waste, Repair, Reverse Logistics and Circular Economy

Course Readings

Required course readings are listed below and posted on Brightspace. You should read the materials before class. Attendance is mandatory (in case you have to miss a class due to a justified excuse, please get in touch with me).

¹ Last day for 100% reduction of tuition fees (19.09.)

² Last day for adding courses (22.09.)

³ Last day for paying first term fees without penalty (30.09.)

⁴ Last day for 50% reduction of tuition fees (10.10.)

⁵ Last day for withdrawing from first term courses without penalty of failure (31.10.)

Week	REQUIRED READINGS
2	<p>Different perceptions and perspectives of waste</p> <p>Moore, S. A. (2012). Garbage matters: Concepts in new geographies of waste. <i>Progress in Human Geography</i>, 36(6), 780–799. https://doi.org/10.1177/0309132512437077</p> <p>Corvellec, H. & Hultman, J. (2012). From “less landfilling” to “wasting less”: Societal narratives, socio-materiality, and organizations, <i>Journal of Organizational Change Management</i>, 25 (2): 297-314, https://doi.org/10.1108/09534811211213964</p>
3	<p>Waste governance and theories, concepts and research methodologies</p> <p>Gutberlet, J., Besen, G. R., & Morais, L. P. (2020). Participatory solid waste governance and the role of social and solidarity economy: Experiences from São Paulo, Brazil. <i>Detritus</i>, 13(13), 167-180.</p>
4	<p>Fieldtrip</p>
5	<p>Waste pickers and waste workers</p> <p>Dias, S. M. (2016). Waste pickers and cities. <i>Environment and Urbanization</i>, 28(2), 375–390. https://doi.org/10.1177/0956247816657302</p> <p>Bulla, J. P., Rendon, M., Trenc, J. E., & Rendon, M. (2021). Policing the stigma in our waste : what we know about informal waste pickers in the global north. <i>Local Environment</i>, 0(0), 1–14. https://doi.org/10.1080/13549839.2021.1974368</p> <p>Aparcana, S. (2017). Approaches to formalization of the informal waste sector into municipal solid waste management systems in low- and middle-income countries : Review of barriers and success factors. <i>Waste Management</i>, 61, 593–607. https://doi.org/10.1016/j.wasman.2016.12.028</p>
6	<p>Local waste systems</p> <p>Wilson, D. C., Rodic, L., Scheinberg, a., Velis, C. a., & Alabaster, G. (2012). Comparative analysis of solid waste management in 20 cities. <i>Waste Management & Research</i>, 30(3), 237–254. https://doi.org/10.1177/0734242X12437569</p> <p>Kaza, S. et al. (2018). <i>What a waste 2.0: A Global Snapshot of Solid Waste Management to 2050</i>. Urban Development Series Knowledge Papers.</p>
7	<p>Electric and Electronic waste</p> <p>Lepawsky, J. (2020). Sources and Streams of Electronic Waste. <i>One Earth</i>, 3(1), 13–16. https://doi.org/10.1016/j.oneear.2020.07.001</p> <p>WHO (2021). Children and digital dumpsites. E-waste exposure and child health. <i>Report</i></p>
8	<p>Plastic waste</p> <p>Gutberlet, J. (2023). Global plastic pollution and informal waste pickers. <i>Cambridge Prisms: Plastics</i>, 1, E9. doi:10.1017/plc.2023.10</p> <p>Karasik, R. et al. (2020) <i>20 Years of Government Responses to the Global Plastic Pollution Problem. The Plastics Policy Inventory</i>. Duke University Nicholas Institute for Environmental Policy Solutions. <i>Report</i></p>
9	<p>Organic waste</p> <p>Fraser, C., & Parizeau, K. (2018). Waste management as foodwork: A feminist food studies approach to household food waste. <i>Canadian Food Studies / La Revue Canadienne Des Études Sur l'alimentation</i>, 5(1), 39–62. https://doi.org/10.15353/cfs-rcea.v5i1.186</p> <p>Al-Obadi, M., Ayad, H., Pokharel, S., & Ayari, M. A. (2022). Perspectives on food waste management: Prevention and social innovations. <i>Sustainable Production and Consumption</i>.</p>
10	<p>Textile waste</p> <p>Stanescu, M.D. (2021). State of the art of post-consumer textile waste upcycling to reach the zero waste milestone. <i>Environ Sci Pollution Res</i>, 28, 14253–14270. https://doi.org/10.1007/s11356-021-12416-9</p>

	Boykoff, M., Chandler, P., Church, P., & Osnes, B. (2021). Examining climate change and sustainable/fast fashion in the 21st century: 'Trash the Runway'. <i>Oxford Open Climate Change</i> , 1(1), kgab003.
11	<i>Reading Break</i>
12	Waste, the environment and climate change Mesquita, J.L.C.; Gutberlet, J.; de Araujo, K.P.; Cruvinel, V.R.N.; Duarte, F.H. (2023). Greenhouse Gas Emission Reduction Based on Social Recycling: A Case Study with Waste Picker Cooperatives in Brasília, Brazil. <i>Sustainability</i> , 15, 9185. https://doi.org/10.3390/su15129185 Cotta, B. (2020). What goes around, comes around? Access and allocation problems in Global North–South waste trade. <i>Int Environ Agreements</i> 20, 255–269. https://doi.org/10.1007/s10784-020-09479-3
13	Zero Waste, Repair and Circular Economy Hannon, J., & Zaman, A. U. (2018). <i>Exploring the Phenomenon of Zero Waste and Future Cities</i> . 1–26. https://doi.org/10.3390/urbansci2030090 Siman, R.R., Harue, L., Lima, R. De, Pardinho, J., Francisca, S., Lessa, D. A., ... Britto, D. (2020). Governance tools: Improving the circular economy through the promotion of the economic sustainability of waste picker organizations. <i>Waste Management</i> , 105, 148–169.

COURSE REQUIREMENTS AND EVALUATION

I. Literature review (20%)

The student will prepare a literature review, which is a survey and discussion of the literature available on one of the topics provided. You will develop a brief overview of what has been studied, argued, and established about this topic. The review is written in essay format and should be organized thematically but can also refer to information chronologically. A list of suggested journals to support your research will be provided. I recommend to focus mostly on recent references (>2015). Also check the guide provided for writing a good literature review. You need to include at least 10 references. The wordcount for this assignment should not exceed **2,000 words**. Due date: **October 16th, midnight. Upload to Brightspace.**

II. Group Presentation & Discussion in Class (20%)

3 or 4 students will be assigned by the instructor to one of the course topics between week 5 and week 13 to prepare a group presentation on the topic. The groups will research additional sources, develop case studies and present practical examples that cover the weekly topic. Your presentation and notes have to be **uploaded to Brightspace on the day of the activity.**

III. Research Paper (40%)

Students will research, analyse and discuss innovations in waste management, in waste governance or regarding waste avoidance. Further detail will be provided during class. The paper should include at least **10 peer-reviewed academic journal references (APA formatting)**. The final paper (**maximum 3,000 words**) is due on midnight of **December 7th. Upload to Brightspace.**

IV. Key reflections on the day (10%)

Students will write key reflections to 5 of the 13 classes, which includes also commenting on the readings and discussions of that day (maximum of 800 words each).

V. Participation with Active Engagement (10%)

Active participation with direct interventions in class throughout the course will be evaluated.

GRADING SYSTEM

Grade	Grade point value	Grade scale	Description
A+ A A-	9 8 7	90-100% 85-89% 80-84%	Exceptional, outstanding and excellent performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
B+ B B-	6 5 4	77-79% 73-76% 70-72%	Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
C+ C	3 2	65-69% 60-64%	Satisfactory, or minimally satisfactory. These grades indicate a satisfactory performance and knowledge of the subject matter.
D	1	50-59%	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F	0	0-49%	Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental.
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.

GEOGRAPHY DEPARTMENT INFO

- Geography Department website: uvic.ca/socialsciences/geography/
- Undergraduate Advising: geogadvising@uvic.ca

POLICY ON LATE ASSIGNMENTS

We encourage you to stay on schedule as you work through your course material and assignments. To help you satisfy the course requirements, deadlines for each of the course assignments have been established to provide ample work time in which to complete the readings and undertake the activities and discussions. You should review all course requirements and due dates at the beginning of the course, compare these to your own schedule, and plan ahead accordingly. If you anticipate conflicts with your

work schedule, please let the course instructor know immediately.

You are expected to work through the course materials and submit all assignments on time. All course participants are expected to complete all assignments and are graded on the same criteria. Evaluation rubric will be provided for each individual assignment type. In order to be fair to students who meet the deadlines, if you submit an assignment late you will lose marks. The late penalty is 20% per day.

POLICY ON ATTENDANCE

Our classes start on time. **As a sign of respect to the instructor and the rest of the class, late arrivals are discouraged, as are early departures.** Students are expected to do the assigned readings to be prepared to participate in the Thursday class discussions. No cell phone use allowed during class.

ACADEMIC INTEGRITY

It is every student's responsibility to be aware of the university's policies on academic integrity, including policies on **cheating, plagiarism, unauthorized use of an editor, multiple submission, and aiding others to cheat.** **Policy on Academic Integrity:** web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html. If you have any questions or doubts, talk to me, your course instructor. For more information, see uvic.ca/learningandteaching/cac/index.php.

ACCESSIBILITY

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability or health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL) as soon as possible (uvic.ca/services/cal/). The CAL staff is available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

POSITIVITY AND SAFETY

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

SEXUALIZED VIOLENCE PREVENTION AND RESPONSE AT UVIC

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:
Where: Sexualized violence resource office in EQHR; Sedgewick C119. Phone: 250.721.8021

Email: svpcoordinator@uvic.ca; Web: uvic.ca/svp

COURSE EXPERIENCE SURVEY (CES)

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. The survey is accessed via MyPage and can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

DISCLAIMER: The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.

STUDENT WELLNESS

A note to remind you to take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone.

Counselling Services - *Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students.* <https://www.uvic.ca/services/counselling/>

Health Services - *University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives.* <https://www.uvic.ca/services/health/>

Centre for Accessible Learning - *The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.* <https://www.uvic.ca/services/cal/>

Elders' Voices - *The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students, staff, faculty and administration in Indigenous ways of knowing and being.*

<https://www.uvic.ca/services/indigenous/students/programming/elders/index.php>



XAXE TTE SÉÁ, ÉTE TEÑEY. XAXE TTE SÉÁ, ÉTE SÁÁL - Our land is sacred. Our language is sacred. Artwork by David Underwood (2018).

We acknowledge with respect the Lkwungen peoples on whose traditional territory the University of Victoria stands, and the Songhees, Esquimalt and WSANEC peoples whose historical relationships with the land continue to this day.