

# Faculty of Science Course Syllabus Environmental Science Program ENVS 2000: Urban Field School Summer 2025

Instructor: Dr. James Steenberg
Office Hours: By appointment

Email: james.steenberg@dal.ca

**Phone:** 902-717-7735

Course Website: Brightspace

**Class Hours:** 

Monday to Friday, 9:00 AM to 4:00 PM (approximate) LSC C216, (Lab: LSC 3111) \* Mona Campbell 1107 on May 19 \*

### Labs/Tutorials:

Integrated with class time

May 19 to May 30, 2025

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

## **Course Description:**

This field course offers an introduction to urban environmental science by examining the role of humans in ecosystems and how humans change ecosystem processes and functions within urban areas. Areas of focus will include forests, soils, watersheds, parks and protected areas, green infrastructure, and the built environment. Students gain hands-on experience in environmental science techniques during excursions to different settings within Halifax Regional Municipality.

### **Course Objectives:**

Students can expect to gain:

- An understanding of urban environments and the human processes that shape them.



- An understanding of the challenges facing the sustainability of urban environments.
- Applied knowledge and hands-on skill development of environmental field methods, data collection and analysis, and communication.

### **Course Material:**

- There is no required textbook for this course, but readings will be posted to Brightspace.
- A field notebook is required and available for purchase at the Dalhousie Bookstores.
- There will be a daily lunch break, but it is recommended that students also bring snacks and fluids for our time in the field.
- A substantial portion of this course will be spent in the field and we will be outdoors **rain or shine**. It is critical that you dress appropriately for the weather and for visiting field sites, including (but not limited to) appropriate footwear, layered clothing, and rain gear.
- Communication will be done through Brightspace and Dal email. Because this is an
  intensive two-week course, it will be important to frequently check Brightspace and
  email for updates.

#### **Assessment:**

Туре	Evaluation	Weight	Due Date
Individual	Participation in class activities and discussion	10%	On-going
Individual	Lab 1: Location and GPS	10%	May 20 (Day 2)
Individual	Lab 2: Sampling and Data Collection	10%	May 21 (Day 3)
Individual	Lab 3: Urban forests	10%	May 23 (Day 5)
Individual	Lab 4: Data analysis	10%	May 28 (Day 8)
Individual	Field notes (two spot checks)	5%	May 23 & 30 (Day 5 & 10)



Group	Final report – environmental project proposal	20%	May 30 *11:59 PM* (Day 10)
Group	Presentation	20%	May 30 (Day 10)
Group	Peer review	5%	May 30 (Day 10)

All assignments must be submitted via the Dropbox on Brightspace by **9:00 AM** on the date the assignment is due. Assignments that are late, without prior late-submission approval from the instructor or supported with a doctor's note, will be deducted 10% for each day past the due date.

## **Grading System:**

Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale:

$\mathbf{A}$ +	(90-100)	$\mathbf{B}$ +	(77-79)	<b>C</b> +	(65-69)	D	(50-54)
A	(85-89)	В	(73-76)	$\mathbf{C}$	(60-64)	F	(<50)
Δ.	(80-84)	R-	(70-72)	C-	(55-59)		

#### **Course Structure:**

We will meet every morning in the classroom before going to any field or lab sessions. Please note: The list and schedule of topics and field trips are subject to change. The uncertainties of visiting field sites the busy schedule of our gracious hosts practitioners may translate to unexpected changes.

Class	Lecture Topics	Location
Day 1: May 19	AM: Welcome, course overview, safety training	AM: Class
Buy 1. May 13	PM: Location and GPS	PM: Field
Day 2: May 20	AM: Sampling and Data Collection	AM: Field
Day 2: May 20	PM: Sampling and Data Collection	PM: Computer lab
Day 2: May 24	AM: Bird survey in Point Pleasant Park	AM: Field
Day 3: May 21	PM: Case study – Overview of urban forest ecosystems	PM: Class/field



Class	Lecture Topics	Location
Day 4: May 22	AM: Case study – Sampling protocols and field measurements for urban forest ecosystems	AM: Field
Buy 4. Ividy 22	PM: Case study – Data management and analysis for urban forest ecosystems	PM: Computer lab
Day 5: May 23	AM: Green infrastructure and urban resilience	AM: Field
Day 3. Iviay 23	PM: Environmental projects proposal development	PM: Class
Day 6: May 26	AM: Facilitated work session	AM: Class
Day 6. Way 20	PM: Neighbourhoods and the built environment	PM: Field
AM: Data analysis  Day 7: May 27  PM: Naturalization of under-utilized urban green spaces		AM: Computer lab PM: Field
Day 8: May 28	AM: Development, nature conflicts, and the urban- wilderness interface	AM: Field
Day 6. May 26	PM: Qualitative field methods	PM: Field
Day 9: May 29	AM: Environment and civic engagement with technology	AM: Field
	PM: Facilitated work session	PM: Class
Day 10: May 30	AM: Facilitated work session	AM: Class
Day 10. May 30	PM: Presentations and course wrap-up	PM: Class



#### **Course Policies**

### Attendance:

Attendance and thoughtful participation is a key component of this course and will be worth 10% of your final grade. Participation helps to better absorb class concepts and apply them in later assignments. Participation includes attendance, full participation in field activities, and engaging in class discussion. Because this is a two-week intensive course, full attendance is critical. Missed classes without appropriate approved accommodation will be reflected in your participation grade.

Some of the course time slots are designated as facilitated work sessions, which are meant to be used by students for the preparation of group work. These can be done in the classroom where the instructor and TAs will be available or can be done independently elsewhere.

### Ground Rules:

We view teaching as a collaboration between Instructors, TAs, and students. Our collective goal is for each of us to increase our knowledge base and hone our research, analytical, and writing skills within the intersections of environment, sustainability, and cities. Each of us has responsibilities to ensure the success of this relationship. As Instructors and TAs, we commit to:

- Ensuring that course materials are instructive and engaging
- Communicating expectations clearly to students
- Responding to and integrating student feedback into the course
- Provoking questions, curiosity, and constructive feedback from students
- Providing grades that are transparent and consistent among all students

In joining this class, students commit to:

- Attending and engaging in all course components
- Respecting alternative viewpoints that might not coincide with their own
- Completing and reflecting on the related readings
- Arriving on time to all elements of the course
- Remaining curious about and critical of the material covered



# **Services Available to Students**

The following campus services are available to help students develop skills in library research, scientific writing, and effective study habits. The services are available to all Dalhousie students and, unless noted otherwise, are free.

Service	Support Provided	Location	Contact
General	Help with	Killam Library	In person: Killam Library Rm G28
Academic	- understanding degree	Ground floor	By appointment:
Advising	requirements and academic	Rm G28	- e-mail: advising@dal.ca
	regulations	Bissett Student	- Phone: (902) 494-3077
	- choosing your major	Success Centre	- Book online through MyDal
	- achieving your educational		
	or career goals		
	- dealing with academic or		
	other difficulties		
Dalhousie	Help to find books and	Killam Library	In person: Service Point (Ground floor)
Libraries	articles for assignments	Ground floor	By appointment:
	Help with citing sources in	Librarian	Identify your subject librarian (URL below) and
	the text of your paper and	offices	contact by email or phone to arrange a time:
	preparation of bibliography		https://libraries.dal.ca/research/subject-
			liaisons/directory.html
Studying	Help to develop essential	Killam Library	To make an appointment:
for Success	study skills through small	3 <sup>rd</sup> floor	- Visit main office (Killam Library main floor, Rm G28)
(SFS)	group workshops or one-on-	Coordinator	- Call (902) 494-3077
	one coaching sessions	Rm 3104	- email Coordinator at: sfs@dal.ca or
	Match to a tutor for help in	Study Coaches	- Simply drop in to see us during posted office hours
	course-specific content (for a	Rm 3103	All information can be found on our website:
	reasonable fee)	Will 1 !!	www.dal.ca/sfs
Writing	Meet with coach/tutor to	Killam Library	To make an appointment:
Centre	discuss writing assignments	Ground floor	- Visit the Centre (Rm G25) and book an appointment
	(e.g., lab report, research	Learning	- Call (902) 494-1963
	paper, thesis, poster)	Commons & Rm	- email <u>writingc@dal.ca</u>
	- Learn to integrate source	G25	- Book online through MyDal
	material into your own work		We are open six days a week
	appropriately		See our website: writingcentre.dal.ca
	- Learn about disciplinary		
	writing from a peer or staff member in your field		
	member in your neid		



# **University Policies and Statements**

# Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit or e-mail the Indigenous Student Centre at 1321 Edward St or <a href="mailto:elders@dal.ca">elders@dal.ca</a>. Additional information regarding the Indigenous Student Centre can be found at: <a href="mailto:https://www.dal.ca/campus\_life/communities/indigenous.html">https://www.dal.ca/campus\_life/communities/indigenous.html</a>

#### **Internationalization**

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: https://www.dal.ca/about-dal/internationalization.html

## **Academic Integrity**

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity. Additional academic integrity information can be found at: https://www.dal.ca/dept/university\_secretariat/academic-integrity.html

### Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (<a href="https://www.dal.ca/campus\_life/academic-support/accessibility.html">https://www.dal.ca/campus\_life/academic-support/accessibility.html</a>) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (<a href="https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html">https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html</a>)

## **Conduct in the Classroom – Culture of Respect**

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class



members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

## **Diversity and Inclusion – Culture of Respect**

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: <a href="http://www.dal.ca/cultureofrespect.html">http://www.dal.ca/cultureofrespect.html</a>

### **Student Code of Conduct**

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner - perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution. The full Code of Student Conduct can be found at:

https://www.dal.ca/dept/university\_secretariat/policies/student-life/code-of-student-conduct.html

## **Fair Dealing Policy**

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at: <a href="https://www.dal.ca/dept/university\_secretariat/policies/academic/fair-dealing-policy-.html">https://www.dal.ca/dept/university\_secretariat/policies/academic/fair-dealing-policy-.html</a>

### **Originality Checking Software**

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at: <a href="https://www.dal.ca/about/leadership-governance/academic-integrity/faculty-resources/ouriginal-plagiarism-detection.html">https://www.dal.ca/about/leadership-governance/academic-integrity/faculty-resources/ouriginal-plagiarism-detection.html</a>



## **Student Use of Course Materials**

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.