

Faculty of Science Course Syllabus Environmental Science Program ENVS 2000: Urban Field School Summer 2024

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) DUNN 304, (computer lab DUNN 301B) May 13 to May 24, 2024

Labs/Tutorials:

Integrated with class time

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.

Student Evaluation:

Туре	Evaluation	Weight	Due Date
Individual	ividual Participation in class activities and discussion		On-going
Individual	Lab 1: Location and GPS	10%	May 14 (Day 2)
Individual	Lab 2: Sampling and Data Collection	10%	May 15 (Day 3)
Individual	Lab 3: Urban forests	10%	May 17 (Day 5)
Individual	Lab 4: Data analysis	10%	May 22 (Day 8)
Individual	Field notes (two spot checks)	5%	May 17 & 24 (Day 5 & 10)
Group	Final report – environmental project proposal	20%	May 24 *11:59 PM* (Day 10)
Group	Presentation	20%	May 24 (Day 10)
Group	Peer review	5%	May 24 (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)	C+	(65-69)	\mathbf{D}	(50-54)
A	(85-89)	В	(73-76)	\mathbf{C}	(60-64)	\mathbf{F}	(<50)
A -	(80-84)	R-	(70-72)	C-	(55-59)		

Course Schedule:

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 12	AM: Welcome, course overview, safety training	AM: Class
Day 1: May 13	PM: Location and GPS	PM: Field
Day 2: May 14	AM: Sampling and Data Collection	AM: Field
Day 2: May 14	PM: Sampling and Data Collection	PM: Computer lab
	AM: Bird survey in Point Pleasant Park	AM: Field
Day 3: May 15	PM: Case study – Overview of urban forest ecosystems	PM: Class/field
D. 4 M. 46	AM: Case study – Sampling protocols and field measurements for urban forest ecosystems	AM: Field
Day 4: May 16	PM: Case study – Data management and analysis for urban forest ecosystems	PM: Computer lab
D. 5 M. 47	AM: Green infrastructure and urban resilience	AM: Field
Day 5: May 17	PM: Environmental projects proposal development	PM: Class
Day 6: May 20	AM: Facilitated work session	AM: Class
,, =2	PM: Neighbourhoods and the built environment	PM: Field



Class	Lecture Topics	Location
AM: Data analysis Day 7: May 21 PM: Naturalization of under-utilized urban green spaces		AM: Computer lab PM: Field
Day 8: May 22 AM: Development, nature conflicts, and the urban-wilderness interface PM: Qualitative field methods		AM: Field PM: Field
Day 9: May 23 AM: Environment and civic engagement with technology PM: Facilitated work session		AM: Field PM: Class
Day 10: May 24 PM: Presentations and course wrap-up		AM: Class 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

Accommodation Policy for Students

Students may request accommodation as a result of barriers related to disability, religious obligation, or any characteristic protected under Canadian Human Rights legislation. The full text of Dalhousie's Student Accommodation Policy can be accessed here: https://www.dal.ca/dept/university_secretariat/policies/academic/student-accommodation-policy-wef-sep--1--2014.html

Students who require accommodation for classroom participation or the writing of tests and exams should make their request to the Advising and Access Services Centre (AASC) prior to or at the outset of the regular academic year. More information and the Request for Accommodation form are available at www.dal.ca/access

Academic Integrity

Academic integrity, with its embodied values, is seen as a foundation of Dalhousie University. It is the responsibility of all students to be familiar with behaviours and practices associated with academic integrity. Instructors are required to forward any suspected cases of plagiarism or other forms of academic cheating to the Academic Integrity Officer for their Faculty.

The Academic Integrity website (<u>academicintegrity.dal.ca</u>) provides students and faculty with information on plagiarism and other forms of academic dishonesty, and has resources to help



students succeed honestly. The full text of Dalhousie's Policy on Intellectual Honesty and Faculty Discipline Procedures is available here:

www.dal.ca/dept/university_secretariat/academic-integrity/academic-policies.html

Please note that Dalhousie subscribes to plagiarism detection software that checks for originality in submitted papers. Any paper submitted by a student at Dalhousie University may be checked for originality to confirm that the student has not plagiarized from other sources. Plagiarism is considered a very serious academic offence that may lead to loss of credit, suspension or expulsion from the University, or even the revocation of a degree. It is essential that there be correct attribution of authorities from which facts and opinions have been derived. At Dalhousie, there are University Regulations which deal with plagiarism and, prior to submitting any paper in a course; students should read the Policy on Intellectual Dishonesty contained in the Calendar.

Furthermore, the University's Senate has affirmed the right of any instructor to require that student assignments be submitted in both written and computer readable format, e.g.: a text file or as an email attachment, and to submit any paper to a check such as that performed by the plagiarism detection software. As a student in this class, you are to keep an electronic copy of any paper you submit, and the course instructor may require you to submit that electronic copy on demand. Use of third-party originality checking software does not preclude instructor use of alternate means to identify lapses in originality and attribution. The result of such assessment may be used as evidence in any disciplinary action taken by the Senate.

Student Code of Conduct

Dalhousie University has a student code of conduct, and it is expected that students will adhere to the code during their participation in lectures and other activities associated with this course. In general:

"The University treats students as adults free to organize their own personal lives, behaviour and associations subject only to the law, and to University regulations that are necessary to protect

- the integrity and proper functioning of the academic and non academic programs and activities of the University or its faculties, schools or departments,
- the peaceful and safe enjoyment of University facilities by other members of the University and the public,
- the freedom of members of the University to participate reasonably in the programs of the University and in activities on the University's premises, and
- the property of the University or its members."

The full text of the code can be found here: www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html



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-
			<u>liaisons/directory.html</u>
Studying	Help to develop essential	Killam Library	To make an appointment:
for Success	study skills through small	3 rd 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)		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		