

Faculty of Science Course Syllabus
Department of Biology

PLANTS IN THE HUMAN LANDSCAPE (BIOL 3225/ENVS 3225)
Winter 2026

Instructor: Rajesh Rajaselvam Email: Rajesh.Rajaselvam@Dal.Ca Office: LSC 7130
Office Hours: Monday/Wednesday 14:30 - 15:30 hrs, Thursdays by appointment only

Lectures: Monday, Wednesday & Friday 8:35 – 9:25 hrs (LSC C 244)

Tutorials: 6 tutorials (80 min/tutorial)
Monday 13:05 – 14:25 hrs (Henry Hicks 212)

*** Delivery of Lectures and Tutorials: In-person only (Attendance at lectures and tutorials is highly important)**

Course Description

The use of plants for human recreation and aesthetic purposes in gardens, public parks, suburban and urban landscapes. Topics include: history of gardens, garden design, identification, uses, and horticultural requirements of plants, soil and nutrients, plant materials, edible and medicinal plants in landscaping and plants and human health. The course includes interactive seminars and a landscape design group project.

Course Prerequisites

BIOL 1010.03/BIOL 1020.03 (B- or higher) or BIOL 1011.03/BIOL 1021.03 (B- or higher) or DISP or PLAN 2001.03 or instructor's permission.

Course Textbook

Alissa Smith & Jack Ingles, 2019. *“Landscaping principles and practices”*. 8th Edition. Nelson Education Ltd. OR *“Plants in the human landscape”*, custom made text. Nelson Education Ltd.

Learning Objectives

- Explain the importance of plants in landscaping and their different roles
- Understand soils and the importance of nutrients
- Become familiar with basic horticultural practices
- Describe and draw different landscape designs
- Understand the use of wild and medicinal plants
- Understand sustainability through landscaping

Course Assessment

Assignment, Exam, or Presentation	Marks %	Date
Quiz 1	05	Feb 09
Mid-Term Exam	20	Feb 25
Oral Presentation (group presentation)	10	Mar 09, 11 & 13
Quiz 2	05	Mar 23
Project submission: Landscape Design	20	Apr 08
Lab/Seminar Reports	16	TBA
Final Exam	24	Apr 06
Total	100	

Landscape Design Project and Oral Presentation

A professional landscape design for the given location should be submitted by the groups at the end of the course. Students/Groups are expected to do a 12-minute power point presentation on their proposed landscape design.

Grading Scale

Conversion of numerical grades to Final Letter Grades follows the [Dalhousie Common Grade Scale](#)

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (<50)
A- (80-84)	B- (70-72)	C- (55-59)	

Course Policies

General Policies:

Class participation is considered vital.

Tutorial/Seminar sessions are compulsory. Complete attendance at all lectures is highly recommended, as drawing skills are taught in class, and this significantly helps improve your grade. Individual landscape drawings should be submitted at the end of the drawing sessions/tutorials. To receive a final grade in the course, students must submit the assigned group landscape drawing project.

Meeting deadlines is mandatory. No late submission without a valid reason is accepted for marking.

Brightspace (course web-tool) is used for regular updates and announcements. TAs are the first point of contact (unless for major issues). Copying the instructor on messages is highly recommended.

Specific Policies:

The policies will only be implemented when a student's absence is due to physical or mental health conditions; involvement in an accident; immediate family illness, injury, or death; or other extenuating circumstances as described in Dalhousie University's Academic Calendar Regulation: Missed or Late Academic Requirements due to Student Absence (SDA)⁽¹⁾. The student must notify the instructor or teaching assistant *prior* to the academic requirement deadline and must submit a completed Student Declaration of Absence form⁽²⁾. No more than **two (2)** separate Student Declaration of Absence (SDA) forms may be used per course during a single term. SDA forms are valid **only** for tutorials, mandatory lectures/presentations & quizzes (not for exams, and submission deadlines).

Quizzes

- If quiz #1 is missed for a valid and credible reason, those marks will be re-distributed to quiz #2
- If quiz #2 is missed for a valid and credible reason, those marks will be re-distributed to the final exam
- If both quizzes are missed, only one will be re-distributed

Midterm Exam and Final Exam

- One makeup exam can be scheduled for any student(s) provided the examination was missed for a valid and credible reason (document/s may be required), the instructor or teaching assistant was notified prior to the examination start time.
- The makeup exam will be a different exam than the one given during the regularly scheduled examination time.
- If the missed exam is a final examination in the Fall term, the makeup exam will be scheduled for January of the following year.

Tutorials

- Missing a tutorial is only acceptable in those cases where the student has notified the teaching assistant prior to the start time of the tutorial with a valid and credible reason.

* Altogether, **no more than three (3)** tutorials, quizzes, and exams may be missed as there will not be enough material to adequately evaluate the student on.

⁽¹⁾Academic Calendar Regulation: Missed or Late Academic Requirements due to Student Absence: <https://www.dal.ca/content/dam/www/about/leadership-and-governance/university-policies/student-absence-regulation.pdf>

⁽²⁾Student Declaration of Absence Form: <https://www.dal.ca/content/dam/www/about/mission-vision-and-values/edia/student-declaration-absence-form.pdf>

Course Content**Schedule (Tentative)****A. Lectures****Week 1:**

Jan 07 - Course Introduction

Jan 09 - History of gardens/landscape

Week 2:

Jan 12 - Trees of Nova Scotia/ Plant database

Jan 14 - Drawing/Graphic Materials and Techniques (Chap 03 & 05)

Jan 16 - Landscape drawing I (Symbols/ Ground covers, Vines & Flower beds)/ **Mandatory**

Week 3:

Jan 19 - **Pre-tutorial 1** & Landscape drawing II (Non-plant features)/ **Mandatory**

Jan 21 - Plant selection (Chap 08)

Jan 23 - The principles of design I (Chap 02)

Week 4:

Jan 26 - The principles of design II (Chap 02)

Jan 28 - Plant nutrients

Jan 30 - Landscape drawing III (Samples)

Week 5:

Feb 02 - **Pre-tutorial 2** & Project introduction/ **Mandatory**

Feb 04 - Fertilizers

Week 6:

Feb 09 - Project detail & Quiz 01/ Mandatory...5 marks

Feb 11 - Flowers (Chap 09)

Feb 13 - Installing landscape (Chap 18, 19 and 20)

Week 7: Study Break

Week 8:

Feb 23 - Introduction to Students' Oral Presentations & Midterm Review

Feb 25 - Midterm Exam20 Marks (@ 8:30 hrs @ LSC C 244)

Feb 27 - Soil

Week 9:

Mar 02 - Landscape drawing IV (backyard)& Project preparation I **TA Session/ Mandatory**

Mar 04 - Medicinal plants in landscape I

Mar 06 - Medicinal plants in landscape II & Landscape design (Project preparation II)

Week 10: Students' Presentation (Landscape design)... 10 Marks

Mar 09 (lecture and tutorial periods), 11, and 13

Week 11:

Mar 16 - Pre-tutorial 3/ Mandatory

Mar 18 - Maintaining landscape plants (Chap 24 & 25)

Mar 20 - Landscape design project (Final touch/ Teaching Team) Mandatory

Week 12:

Mar 23 - Pre-tutorial 4 & QUIZ 02/ Mandatory... 5 Marks

Mar 25 - Plant injuries (Chap 26 & 28)

Mar 27 - Group project/ class time

Week 13:

Mar 30 - Landscape design project (Additional time/ teaching team) **Mandatory**

Apr 01 - Benefits of plants/ Trees and Environment

Week 14:

Apr 06 - Final exam ...24 Marks (@ 8:30 hrs @ LSC C 244)

Apr 08 - Group project submission (in class)

B. Seminar/Tutorial sessions

Attendance mandatory, (4 x 4) = 16 marks

Jan 19: **Assignment 1:** Landscape design I (Scales and symbols/ Trees and Shrubs) **(Report required)**

Feb 02: **Assignment 2:** Landscape design II (Backyard landscaping) **(Report required)**

Feb 09: Group Project Information and Group Assignments

 Landscape Design: Landscape design (Organizing space in the landscape/ labelling)

Feb 23: Design project (Preparation)

Mar 02: Design project (Discussion/final touch)

Mar 09: Student presentations

Mar 16: **Assignment 3:** Landscape design III (Professional Landscaping) **(Report required)**

Mar 23: **Assignment 4:** Landscape design IV **(Report required)**

** Please note that lectures and tutorials are subject to change due to administrative decisions and weather-related disruptions.*

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 elders@dal.ca. Additional information regarding Mi'kmaq and Indigenous Relations (including the Elders in Residence program, Land Acknowledgements, Understanding Our Roots, and much more) can be found at: <https://www.dal.ca/about/mission-vision-values/mikmaq-indigenous-relations.html>

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/mission-vision-values/global-relations.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 (https://www.dal.ca/campus_life/academic-support/accessibility.html) 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 (https://www.dal.ca/campus_life/ssc.html).

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: <https://www.dal.ca/about/mission-vision-values/equity-diversity-inclusion-and-accessibility/about-office-equity-inclusion.html>

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/content/dam/www/about/leadership-and-governance/governing-bodies/code-student-conduct.pdf>

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:

<https://www.dal.ca/content/dam/www/about/leadership-and-governance/university-policies/fair-dealing-policy.pdf>

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.

Student Resources and Support

University Policies and Programs

Important Dates in the Academic Year (including add/drop dates):

http://www.dal.ca/academics/important_dates.html

Classroom Recording Protocol: <https://www.dal.ca/content/dam/www/about/leadership-and-governance/university-policies/class-recording-protocol.pdf>

Dalhousie Grading Practices Policies: <https://www.dal.ca/content/dam/www/about/leadership-and-governance/university-policies/grading-practices-policy.pdf>

Grade Appeal Process: https://www.dal.ca/campus_life/academic-support/grades-and-student-records/appealing-a-grade.html

Sexualized Violence Policy: <https://www.dal.ca/content/dam/www/about/leadership-and-governance/university-policies/sexualized-violence-policy.pdf>

Scent-Free Program: <https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html>

Learning and Support Resources

General Academic Support – Advising (Halifax): https://www.dal.ca/campus_life/academic-support/advising.html

General Academic Support – Advising (Truro): https://www.dal.ca/campus_life/ssc.html

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness.html

On Track (helps you transition into university, and supports you through your first year at Dalhousie and beyond): https://www.dal.ca/campus_life/academic-support/On-track.html

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Mi'kmaq and Indigenous Relations: <https://www.dal.ca/about/mission-vision-values/mikmaq-indigenous-relations.html>

Elders-in-Residence (The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit the office in the Indigenous Student Centre or contact the program at elders@dal.ca or 902-494-6803: <https://www.dal.ca/about/mission-vision-values/mikmaq-indigenous-relations/elders-in-residence-and-traditional-knowledge-keepers.html>

Black Student Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre.html

LGBTQ2SIA+ Collaborative: <https://www.dal.ca/about/mission-vision-values/equity-diversity-inclusion-and-accessibility/about-office-equity-inclusion/community-specific-groups/lgbtq2sia-collaborative.html>

Dalhousie Libraries: <http://libraries.dal.ca/>

Copyright Office: <https://libraries.dal.ca/services/copyright-office.html>

Dalhousie Student Advocacy Services: <https://www.dsu.ca/dsas?rq=student%20advocacy>

Dalhousie Ombudsperson: https://www.dal.ca/campus_life/safety-respect/ombudsperson.html

Human Rights and Equity Services: <https://www.dal.ca/about/mission-vision-values/equity-diversity-inclusion-and-accessibility/about-office-equity-inclusion/human-rights-and-equity-services.html>

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Study Skills/Tutoring: http://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Faculty of Science Advising Support: <https://www.dal.ca/faculty/science/current-students/undergrad-students/degree-planning.html>

Safety

Biosafety: <http://www.dal.ca/dept/safety/programs-services/biosafety.html>

Chemical Safety: <https://www.dal.ca/dept/safety/programs-services/chemical-safety.html>

Radiation Safety: <http://www.dal.ca/dept/safety/programs-services/radiation-safety.html>

Laser Safety: <https://www.dal.ca/dept/safety/programs-services/radiation-safety/laser-safety.html>