

Faculty of Science Course Syllabus Department of Biology

PLANTS IN THE HUMAN LANDSCAPE (BIOL 3225/ENVS 3225) Winter 2024

| Instructor: | Rajesh Rajaselvam | Email: <u>Rajesh.Rajaselvam@Dal.Ca</u> | Office: LSC 7130 | | |
|--|---|--|------------------|--|--|
| | Office Hours: Monday/Wednesday 14:30 - 15:30 hrs, Thursdays by appointment only | | | | |
| Lectures: | Monday, Wednesday & Friday 9:35 – 10:25 hrs (LSC C 244) | | | | |
| Tutorials: | 6 tutorials (80 min/tutorial) | | | | |
| | Monday 11:35 – 12:55 ł | nrs (LSC C 206) | | | |
| * Delivery of lectures & tutorials: In-person (It is very important that you attend lectures and tutorials). | | | | | |

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 28 |
| Oral Presentation (group presentation) | 10 | Mar 11, 13 & 15 |
| Quiz 2 | 05 | Mar 25 |
| Project submission: Landscape Design | 20 | Apr 09 |
| Lab/Seminar Reports | 16 | ТВА |
| Final Exam | 24 | Apr 08 |
| 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) |
|----|----------|------------|------------|-----------|
| А | (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 of all lectures is highly recommended since it helps to improve your grade significantly. Individual landscape drawings should be submitted at the end of the drawing sessions/tutorials.

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 submission deadlines).

<u>Quizzes</u>

- 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.

<u>Tutorials</u>

• 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: <u>https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/university_secretariat/policy-repository/Student%20Absence%20Regulation%20(May%202018)%20(3).pdf</u>
⁽²⁾Student Declaration of Absence Form: <u>https://cdn.dal.ca/content/dam/dalhousie/pdf/campuslife/Health%20and%20wellness/FINAL%20Student%20Declaration%20of%20Absence%20Form.pdf</u>

Course Content

Schedule (Tentative)

<u>A. Lectures</u> <u>Week 1:</u> Jan 08 - Course Introduction



Jan 10 - History of gardens/landscape Jan 12 - Trees of Nova Scotia/ Plant database

Week 2:

Jan 15 - Drawing/Graphic Materials and Techniques (Chap 03 & 05)

Jan 17 - Landscape drawing I (Symbols/ Ground covers, Vines & Flower beds)/ Mandatory

Jan 19 - Plant selection (Chap 08)

Week 3:

Jan 22 - **Pre-tutorial 1** & Landscape drawing II (Non-plant features)/ *Mandatory* Jan 24 - The principles of design I (Chap 02) Jan 26 - The principles of design II (Chap 02)

<u>Week 4:</u> Jan 29 - Plant nutrients Jan 31 - Fertilizers

Week 5:

Feb 05 - Pre-tutorial 2 & Project introduction/ Mandatory

Feb 07 - Flowers (Chap 09)

Feb 09 - Quiz 01.....5 marks & Midterm Review

Week 6:

Feb 12 – Landscape drawing for backyards/ Mandatory

Feb 14 - Landscape drawing III (Samples)

Feb 16 - Landscape drawing IV (Samples)

Week 7: Study Break

<u>Week 8:</u> Feb 26 - Introduction to Students' Oral Presentations/Project discussion Feb 28 - Midterm Exam20 Marks (@ 13:35 hrs @ LSC C 244) Mar 01 - Soil

<u>Week 9:</u>

Mar 04 - Landscape design (Project preparation I) TA Session/ Mandatory

Mar 06 - Medicinal plants in landscape I

Mar 08 - Medicinal plants in landscape II & Landscape design (Project preparation II)

<u>Week 10:</u> Students' Presentation (Landscape design)...... **10 Marks** Mar 11, 13 and 15

Week 11:

Mar 18 - Pre-tutorial 3/ Mandatory

Mar 20 - Maintaining landscape plants (Chap 24 & 25)

Mar 22 - Landscape design project (Discussion/ Teaching Team) Mandatory



<u>Week 12:</u> Mar 25 - Pre-tutorial 4 & QUIZ 02/ Mandatory..... 5 Marks Mar 27 - Plant injuries (Chap 26 & 28)

Week 13:

- Apr 01 Landscape design project (Final touch/ TAs) Mandatory
- Apr 03 Benefits of plants/ Trees and Environment
- Apr 05 Group project/ class time

Week 14:

Apr 08 - Final exam 24 Marks (@ 11:35 hrs @ LSC C 206)

Apr 09 - Group project submission

B. Seminar/Tutorial sessions

Attendance mandatory, (4 x 4) = 16 marks

Jan 22: Assignment 1: Landscape design I (Scales and symbols/ Trees and Shrubs) (Report required) Feb 05: Assignment 2: Landscape design II (Backyard landscaping) (Report required) Feb 12: Group project information, Landscape Design: Landscape design (Organizing space in the landscape/ labelling)

Feb 26: Design project (Preparation) Mar 04: Design project (Discussion/final touch)

Mar 18: Assignment 3: Landscape design III (Professional Landscaping) (Report required)

Mar 25: 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

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

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 <u>elders@dal.ca</u>. Additional information regarding the Indigenous Student Centre can be found at: <u>https://www.dal.ca/campus_life/communities/indigenous.html</u>

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: <u>https://www.dal.ca/about-dal/internationalization.html</u>



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 (<u>https://www.dal.ca/campus_life/academic-support/accessibility.html</u>) 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 (<u>https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html</u>)

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: http://www.dal.ca/cultureofrespect.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/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: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html

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: <u>https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html</u>

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

Advising

General Advising https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: <u>https://www.dal.ca/faculty/science/current-students/undergrad-</u>students/degree-planning.html

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

Black Students Advising Centre: <u>https://www.dal.ca/campus_life/communities/black-student-advising.html</u>

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

Academic supports

Library: https://libraries.dal.ca/

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

Studying for Success: <u>https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html</u>

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

Fair Dealing Guidelines https://libraries.dal.ca/services/copyright-office/fair-dealing.html



Other supports and services

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

Student Advocacy: https://dsu.ca/dsas

Ombudsperson: <u>https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html</u>

Safety

Biosafety: <u>https://www.dal.ca/dept/safety/programs-services/biosafety.html</u> Chemical Safety: <u>https://www.dal.ca/dept/safety/programs-services/chemical-safety.html</u> Radiation Safety: <u>https://www.dal.ca/dept/safety/programs-services/radiation-safety.html</u>

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

Dalhousie COVID-19 information and updates: <u>https://www.dal.ca/covid-19-information-and-updates.html</u>

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