



PLSC 268 Plant Propagation
2 Credits

Course Description:

Plant propagation teaches the principles and practices of sexual and asexual reproduction of plants. Propagation methods covered are seed, cuttings, layering, division, grafting, budding and micro-propagation.

Pre-/Co-requisites: None

Course Objectives:

The objective of this course is to acquaint the student with the basic principles and methods of plant propagation techniques practiced in the horticulture industry today and in the past. Upon completion of this class, you will have a workable knowledge of:

- Seed germination and handling
- Production from cuttings; grafting and budding; layering and other natural modifications
- Division
- Propagation by specialized stems and roots and methods of micro-propagation.

Instructor: Raquel Dugan-Dibble

Office: Molberg Center; 21

Office Hours: By arrangement

Phone: 701-228-5481

Email: R_DuganDibble@dakotacollege.edu

Lecture/Lab Schedule:

T, Th 10 – 10:50 am

Textbook(s):

Students will be assigned Digital Open Educational Resource reading material throughout the course related to each week's topic(s).

Recommended Textbooks (not required)

American Horticultural Society – Plant Propagation

Reference Textbooks (not required)

- *Plant Propagation Principles and Practices*, Hudson T. Hartmann, Dale E. Kester, Fred T. Davies Jr.
- *Plant Propagation A to Z*, Geoff Bryant
- *Secrets of Plant Propagation*, Lewis Hill

Course Requirements:

GRADING: Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. Any missed quiz, exam or assignment not made up within the allotted time will be given a zero. The “allotted time” given is at the discretion of the instructor and will be communicated to the students throughout the course. (Note: It is the responsibility of the student to schedule make-up work with the instructor at a time convenient to both parties.) Late work will be accepted at 20% per day reduction. Final letter grades are assigned based on the following criteria:

A = 90-100% of the total points

B = 80-90% of the total points

C = 70-80% of the total points

D = 60-70% of the total points

F = <60% of the total points

Assignments (25 pts each)

Pet Plant Project (217 pts)

Class and Lab participation (10pts per class)

Field Trip Participation (50 pts)

Plant Propagation Project (300 pts)

Grafting Project (100 pts)

Exams (60 pts each)

❖ Field Trips will be taken as part of this class in order to gain experience and exposure to the Industries involved in Plant Propagation.

Tentative Course Outline:

Week	Dates	Topic
Week 1	Jan 10 - 13	Introduction to course and Pet Plant Project
Week 2	Jan 17 - 20	Overview and History of Plant Propagation and Plant Propagation Project
Week 3	Jan 23 – Jan 26	Asexual propagation-Cutting and Clones
Week 4	Jan 30 – Feb 3	Asexual propagation -Layering and Division
Week 5	Feb 6 - 10	Asexual propagation -Tissue Culture
Week 6	Feb 13 - 17	Sexual propagation
Week 7	Feb 20 – Feb 24	Sexual propagation-Seed Movie
Week 8	Feb 27 – March 3	Exam 1
Week 9	Mar 6 - 10	Grafting and Grafting Paper
	Mar 13 - 17	Spring Break
Week 10	Mar 20 – 23	Grafting
Week 11	Mar 27 – 31	Perennials
Week 12	Apr 3 – Apr 7	Annuals and Biennials
Week 13	Apr 10 – 14	Bulbous plants and vegetables
Week 14	Apr 17 – 21	Pest and Disease
Week 15	Apr 24 – 28	Exam 2
Week 16	May 1 – May 5	Presentation of Final Lab Propagation Projects Final Lab Test

CTE Competency/Department Learning Outcome(s):

- Employ industry-specific skills in preparation for workplace readiness
- Combine general education and vocational skills curriculum
 - Horticulture LO 2. Demonstrate critical thinking and decision-making skills.

Relationship to Campus Focus:

All aspects of horticulture develop an appreciation for nature and the materials that Mother Nature and technology have provided for us. Because of this we are able to make the world a more beautiful place.

Classroom Policies:

Plagiarism:

The strength Dakota College at Bottineau depends on academic and personal integrity. In this course, you must be honest and truthful. Plagiarism is the use of someone else's work, words, or ideas as if they were your own. Here are three reasons not to do it:

- By far the deepest consequence to plagiarizing is the detriment to your intellectual and moral development: you won't learn anything, and your ethics will be corrupted.
- Giving credit where it's due but adding your own reflection will get you higher grades than putting your name on someone else's work. In an academic context, it counts more to show your ideas in conversation than to try to present them as *sui generis*.
- **This means absolutely not cut and pasting directly into your assignment from other sources. I want everything is your own words!**
- Finally, all students are expected to adhere to the highest standards of academic integrity. Students must complete all work themselves. Cheating or plagiarism is a serious offense and is subject to disciplinary action by the instructor and the college administration. Please be sure to review the **Student Handbook**. **The consequences of plagiarism in this class depend on the level exhibited, but are at a minimum a failing grade on the assignment up to failing the class.**

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.