

Course Prefix/Number/Title: BOT 211 Botany I

Number of Credits: 4

Course Description: A general botany course covering plant evolutionary history, form, structure, and physiology. Lectures focus on plant diversity through time and a general knowledge of plant function with emphasis placed on North Dakota plants. Labs emphasize cells, tissues, phyla, physiology of plants, and classification.

Pre-/Co-requisites: BIOL 150 and BIOL 151 or Instructor Approval

Course Objectives: Demonstrate an understanding and proficiency with the following concepts:

1. Structure and function of vascular plants, particularly Coniferophyta and Anthophyta.
2. Diversity of plants and plant-like organisms.
3. The ecology and evolution of plant and plant-like organisms.
4. The significance of these organisms to human kind.

Instructor: Janelle Green

Office: NSC 113

Office Hours: MWF 8:00-9:00AM and MW 11:00-12:00PM

Phone: 701-228-5472

Email: Janelle.a.green@ndus.edu

Lecture/Lab Schedule: NSC 126 Lecture: MWF 9:00-9:50AM
Lab: Th 1:00-2:50PM

Textbook(s): Plant Biology. Bidlack. McGraw Hill. ISBN 9781260488616 Access Code Only

Course Requirements:

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| • 5 Hour Exams (100 pts. each) | 500 pts. |
| • 1 Final Exam | 150 pts. |
| • Lecture Activities/Simulations/Quizzes | 160 pts. |
| • Deciduous Leaf Collection | 100pts. |
| • 12 Lab Handouts | 240 pts. |
| • Lab Final Exam/Lab Midterm | 100 pts. |
| • 12 Lab Attendance and Participation | 60 pts. |

A = 100-89.5%
B = 89.49-79.5%
C = 79.49-69.5%
D = 69.49-60%
F = below 60%

Total: 1250 pts

**This is tentative and subject to change at the discretion of the instructor.*

Tentative Course Outline:

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Week	Topic	Lab	
1	Introduction to plant cell chemistry, structure, function	None	
2	Plant cells and tissues, translocation and transpiration	Plant cell structure and function/ Start Deciduous ND Leaf Collection	
Exam #1			
3	Roots, Stems, Leaves	Primary tissues of stems and roots	
4	Flowers, Fruits, and Seeds	Leaf Structure and Function	
Exam #2			
5	Water in Plants, Photosynthesis	Secondary Growth and Wood Anatomy	
6	Growth and Development	Plant Form, Function, Diversity "Greenhouse Lab"	
7	Early development of the Plant Body	Flowers, Fruits, and Seeds	
Exam #3			
8	Domain Archaea & Bacteria, Viruses, Viroids, Prions	Domain Bacteria	
9	Kingdom Fungi: Chytridiomycota, Zygomycota, Ascomycota	Fungi I: Ascomycota and Lichens Lab Midterm Exam	
10	No class	No lab	
11	Basidiomycota, Deuteromycetes, review	Fungi II: Basidiomycota, Chytridiomycota, Zygomycota	
Exam #4			
12	Deuteromycetes continued	Protista I: Myxomycota, Euglenophyta, Rhodophyta, Dinophyta, Oomycota, Chrysophyta	
13	Kingdom Protista: Myxomycota, Oomycota, Euglenophyta, Rhodophyta, Dinophyta, Chrysophyta, Bacillariophyta	Protista II: Bacillariophyta, Phaeophyta, Chlorophyta	

14	Phaeophyta, Chlorophyta, Kingdom Plantae: Bryophyta, Hepatophyta	Plantae I: Hepatophyta, Bryophyta, Psilotophyta, Lycophyta	
15	Psilotophyta, Lycophyta, Sphenophyta, Pterophyta Cycadophyta, Ginkgophyta	Plantae II: Sphenophyta and Pterophyta	
Exam #5			
16	Gnetophyta, Coniferophyta, Anthophyta	Plantae III: Cycadophyta, Coniferophyta, Anthophyta	
17	Biomes, Plants & Society ND Native Species Overview	Lab Final Exam	
Final Exam			

This course will require you to be outside and do some minor traveling to find and discover leaf samples on more than one occasion and it may not be restricted to the hours of the course.

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):

- Learning Competency 1: Identifies the interrelationships between humans and their environment
Learning Outcome 2: Demonstrates an understanding of natural environment.

Relationship to Campus Focus:

Technological/science developments are discussed in relationship to plants and the relationship of how DNA analysis is changing our approach to classification.

Understanding plants and technological/genetic engineering developments in plants and biomes in relation to society.

Classroom Policies:

Absences:

Excused absences will be for only the following reasons and still need to be discussed with me via email or phone call: sickness with a doctor's note must be emailed to me, passing of a close family member, if you're an athlete and need to miss class for a game. If you know you are going to be gone, notify me ASAP. Knowing of an absence requires you to make up work prior to being gone unless a special arrangement has been made with myself.

All requests for absences need to be reported to me immediately and directly from you, not a third party. If you do not let me know why you have missed a class or discuss with me in advanced your participation for that day will result in a ZERO. You need to make advanced

arrangements with me—the SOONER THE BETTER. You need to speak with me if you know you will be gone so we can schedule make up assignments

Missing an Exam:

If you know you will be gone during an exam day you need to let me know THREE days in advanced. If you miss an exam and I am not aware that you were going to miss it then your grade for that exam will result in a ZERO. There will be no make-up exams for those who do not inform me of their absences on exam days.

Lab Absence:

Labs are hard to organize and setup. If you are going to absent it is easier to make up the lab up ahead of time instead of after. Simply not showing up for lab, or being greater than 5 min late, will result in forfeiting all participation points and points for the handout if you did not notify the instructor at least 12hrs in advance that you were going to be absent. If you are ill and it is last minute you will need to provide a doctor's note or an e-mail from the school nurse in order to make up the lab.

Lab Participation Points:

The points are awarded to students that participate equally within their group and arrive on time. Simply showing up to lab does not award you these points. They are awarded at the discretion of the instructor.

Late Policy:

If you are planning on being late to class please be respectful of other students in the class and sit towards the back of the room (lecture). Be discrete when opening your belongings and getting prepared. During an exam date the door will be locked after the last student receives their test that was in class on time. If tardiness becomes an issue the door will be locked on all class dates 5 minutes after the start. This will be a regular occurrence for lab. If you are locked out, you will miss/lose that day's materials and all points associated with it.

Electronic Device Policy:

Electronic devices will only be used in class for answering in-class questions and review participation. You will be instructed to use them at those times. If you are on your phone/unauthorized computer/smart watch/headphones or any other unauthorized device while not instructed by myself then, I will ask you to leave my class for that day. If you are using a device for ANY reason during an exam your exam will be taken away from you and you will receive a ZERO on the exam. You should not be texting or on social media while in lecture/lab. You cannot be wearing any smart technology during ANY exam. You will be asked to remove it. If you choose to not remove it then you will be asked to leave and you will not be able to complete the exam which will result in a ZERO. All devices should be powered down during

an exam. If your device is vibrating or causing a disturbance you may be asked to leave the classroom.

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.

Depending on the severity of the occurrence, determined by the instructor, the student will be given a zero on the assignment and the information could be forwarded to the Dean of Academic Affairs. If the occurrence is rendered as substantial the student could fail the course.

Disabilities or Special Needs:

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

It is your responsibility to schedule exam proctoring. You must inform me that you have testing accommodations **THREE** days before an exam (ie. need extended time).

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.