

Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: BOT 212 Botany II (4CR)

Prerequisites: BIOL 120 or instructor approval

Course Description: Diversity of plants, their classification, anatomy, physiology, and ecology.

Includes a general overview of fungi and algae. Plant cells and tissues, photosynthesis, translocation and transpiration, root/stem/leaf structure and function, secondary growth, growth and development, flowers/fruits/seeds, survey of Kingdom Monera/Protista/Fungi/Plantae, viruses, prions, ethnobotany

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

1. structure and function of vascular plants, particularly Coniferophyta & Anthophyta (Goal 7)
2. diversity of plants and plant-like organisms (Goal 7)
3. the ecology and evolution of plant and plant-like organisms (Goal 7)
4. the significance of these organisms to human kind (Goal 7)

Instructor: Lura

Office: NSC 114

Office Hours: MWF 10:00-11:00 and 1:00-2:00

Phone: (701) 228-5472

Email: chuck.lura@dakotacollege.edu

Lecture/Lab Schedule: Spring semester

Textbook(s): Raven, P.H., R.F. Evert, and S.E. Eichhorn. 2005. Biology of Plants. W.H. Freeman and Worth Publishers. 7th Ed.

Lura, C.L. 2010. Botany 212 Lab Manual

Course Requirements:	4 Hour Exams @ 100 pts. ea.	400 pts.
	Lab quizzes	130 pts
	Lecture quizzes, assignments, etc.	170 pts
	Lab final exam	<u>100 pts</u>
	TOTAL POINTS:	800

A = 100-90%

B = 89-80%

C = 79-70%

D = 69-60%

F = below 60%

Tentative Course Outline:

**BOTANY 212 TENTATIVE SYLLABUS
SPRING 2011**

Date	Topic	Reading Assign.
Jan 11-14	Introduction to plant cell chemistry, structure, function	Chapter 1,2,3
Jan 17-21	Monday January 17 Martin Luther King Day Photosynthesis Lab: Plant Cell Structure and Function	7
Jan 24-28	Plant cells and tissues, Translocation & Transpiration Lab: Primary Tissues of Stems and Roots	24,31
Jan 31-Feb 4	Roots, Stems, Leaves FIRST HOUR EXAM, FRIDAY FEBRUARY 4 Lab: Leaf Structure and Function	25,26
Feb 7-11	Secondary Growth, Growth and Development Lab: Secondary Growth and Wood Anatomy	27,28,29
Feb 14-18	Reproduction, Flowers, Fruits, Seeds Lab: Plant Form, Function, Diversity "Greenhouse Lab"	21
Feb 21-25	Monday February 21, President's Day Early development of the Plant Body SECOND HOUR EXAM, FRIDAY FEBRUARY 25 Lab: Flowers, Fruits, and Seeds	21
Feb 28-Mar 4	Domain Archaea & Bacteria, Viruses, Viroids, Prions Lab: Domain Bacteria	14
Mar 7-11	Kingdom Fungi: Chytridiomycota, Zygomycota, Ascomycota Lab: Fungi I: Ascomycota and Lichens	15
Mar 14-18	SPRING BREAK	
Mar 21-25	Basidiomycota, Deuteromycetes Lab: Fungi II: Basidiomycota, Chytridiomycota, Zygomycota	15
Mar 28-Apr 1	Deuteromycetes continued, review THIRD HOUR EXAM, FRIDAY APRIL 1 Lab: Protista I: Myxomycota, Euglenophyta, Rhodophyta, Dinophyta, Oomycota, Chrysophyta	15
Apr 4-8	Kingdom Protista: Myxomycota, Oomycota, Euglenophyta, Rhodophyta, Dinophyta, Chrysophyta, Bacillariophyta Lab: Protista II: Bacillariophyta, Phaeophyta, Chlorophyta	16,17
Apr 11-15	Phaeophyta, Chlorophyta, Kingdom Plantae: Bryophyta, Hepatophyta Lab: Plantae I: Hepatophyta, Bryophyta, Psilotophyta, Lycophyta	17,18

Apr 18-22	Psilotophyta, Lycophyta, Sphenophyta, Pterophyta Cycadophyta, Ginkgophyta Lab: Plantae II: Sphenophyta and Pterophyta Friday, April 22 – Easter Break	19,20
Apr 25-29	Monday, April 25 – Easter Break Gnetophyta, Coniferophyta, Anthophyta Lab: Plantae III: Cycadophyta, Coniferophyta, Anthophyta	20,21,22
May 2-6	Biomes, Plants & Society Lab: LAB FINAL FINAL EXAM FRIDAY MAY 6	33,34

General Education Goals/Objectives:

Goal 1: Explains the interrelationships between humans and their environment and the role of science in their lives

Goal 2: Demonstrates knowledge and application of technology

Relationship to Campus Theme: Class presentation/discussion on how DNA analysis is changing our approach to classification

Classroom Policies: Regular attendance and participation in lab and lecture is expected. All make-up exams will include a significant essay/short answer component and must be made up within one week of the students return to class unless prior arrangements have been made.

Academic Integrity: Cheating on a test, quiz, or other assessment results in zero points for the assessment.

Disabilities and Special Needs: Any accommodations due to a learning disability must come through the MSU-B Learning Center. If you have a diagnosed learning disability, you need to contact the Learning Center in Thatcher 1104 or phone (701) 228-5477.