

Dakota College at Bottineau Course Syllabus

HORT 151 Intro to Plants and Pests

Number of credits: 1

Course Description: This course is an introduction to basic soil science, plant anatomy and physiology, diseases, and pests as it pertains to specialty crops. Students will learn basic plant growth, organization, function, adaptations and reproduction along with basic soil composition and how it affects plant growth and health.

Pre-/Co-requisites: None

Course Objectives:

Students will:

1. Learn basic plant biology pertaining to specialty crops
2. Understand basic plant growth, organization, function, adaptations and reproduction of specialty crops
3. Learn basic soil science pertaining to specialty crops
4. Identify basic soil composition and how it affects plant growth and health
5. Become familiar with basic plant pathology including plant pests pertaining to specialty crops

Instructor:

Amy Koehler

Office:

Molberg 27

Office Hours:

By appointment

Phone:

701-228-5605

Email: Amy.koehler@dakotacollege.edu

Lecture/Lab Schedule: Online

Textbook(s): **REQUIRED**

You can also purchase a digital copy on Amazon

Botany for Gardeners by Brian Capon

Paperback: 268 pages

Publisher: Timber Press; 3rd edition (May 21, 2010)

Language: English

ISBN-10: 160469095X

ISBN-13: 978-1604690958

Product Dimensions: 6 x 0.6 x 9 inches

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.) 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

The instructor reserves the right to modify this syllabus and course requirements at any time.

Tentative Course Schedule

Week	Topics and Assignments
1 Plant Growth	Intro: Live recording from the instructor Read: <ul style="list-style-type: none"> • Cells and Seeds (Chapter 1) • Roots and Shoots (Chapter 2) Review: Cells, Seeds, Roots and Shoots ppt Week 1 Discussion Forum due (40 pts)
2 Organization/ Functions	Read: <ul style="list-style-type: none"> • Adaptations for protection (Chapter 5) • Adaptions to Fulfill Basic Needs (Chapter 6) Watch: Evolutionary Ecology of Plant Defenses Webinar Week 2 Discussion Forum due (40 pts) Week 2 Quiz due (20 pts)
3 Function/Soils	Read: The Uptake and use of Water, Minerals and Light (Chapter 8) "soil and Plant Nutrition: A Gardener's Perspective" Dr. Lois Berg Stack, Extension Professor (2011). Review: Intro to Soils and effects on plants Health and Growth PPT Watch Living Soil Video... Week 3 Living Soil WS (60 pts)
4 Reproduction	Read: From Flowers to Fruits (Chapter 9) Watch: Reproductive Cycle of Flower Plants / The Amazing Lives of Plants video Week 4 Discussion Forum due (40 pts) Week 4 Quiz due (20 pts)
5 Plant Inheritance	Read: Strategies of inheritance 10 Watch: Plant Breeding- Iowa State University Week 5 Plant Breeding Video assignment (30 pts)
6 Plant Disease and Pests	Read: " Introduction to Plant Diseases " -University of Nebraska Extension 2014 Review: <ul style="list-style-type: none"> • Diseases and Plants ppt • Introduction to Plant Disease USDA presentation Week 6 Discussion Forum due (40 pts)

Week	Topics and Assignments
7 Plant Disease and Pests Cont.	Review: Pests and Plants; Pest Control Past, Present, and Future PPT Read: <ul style="list-style-type: none"> • Basics of Entomology • Integrated Pest Management Watch: Four Seasons Gardening Series - Beneficial Insects Week 7 Discussion Forum due (40 pts) Week 7 Quiz due (20 pts)
8 Final Exam	Study Final Exam Due!!!! (150 pts)

Relationship to Campus Theme:

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.

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:

All students are expected to excel to the best of their ability. Students must adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the instructor and college administration. For more information, refer to the student handbook.

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*.
- 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.**

Disabilities and Special Needs:

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact your instructor and the Learning Center (701-228-5479) as early as possible during the beginning of the semester.

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. If you have experienced any form of gender or sex-based discrimination or harassment, including non-consensual sexual intercourse, sexual harassment, relationship violence, or stalking, know that help and support are available.

DCB has staff members trained to support survivors in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, and more. The College strongly encourages all students to report any such incidents to the College Title IX Coordinator.

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 you tell 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. If you wish to speak to a confidential employee who does not have this reporting responsibility, you can find a list of resources on the Title IX website. www.dakotacollege.edu/student-life/safety/title-ix