

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 agricultural and ornamental plants. 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 agricultural and ornamental plants.
2. Understand basic plant growth, organization, function, adaptations and reproduction of agricultural and ornamental plants.
3. Learn basic soil science pertaining to agricultural and ornamental plants.
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 agricultural and ornamental plants.

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:

Must earn 355 of the 500 possible points to pass the course.

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.)

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

****There is at least one item due every week on the course!**

Tentative Course Outline:

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)

CTE Competency/Department Learning Outcome(s):

- Employ industry-specific skills in preparation for workplace readiness
- Combine general education and vocational skills curriculum
 - Horticulture LO 1. Attain level of technical skills and practices used in Horticulture Industry in preparation for workplace readiness.

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.

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.

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 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.