

## Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title:

PLSC 210: 4 credits Fall Semester 2010

Course Description:

Horticulture Science will help students become literate in the field of horticulture. By completing this course, students will have a workable knowledge of the classification of horticultural plants, the structure and function of plants, growth and reproduction of plants, control of light, temperature and fertilization and study methods of propagation, pruning and training and production and marketing of major horticulture crops.

Course Objectives:

Upon completion of this class students will;

1. Understand the basic principles of plant structure, growth and development.
  - a. Identify anatomical parts of a plant.
  - b. Describe physiological processes of a plant.
2. Understand principles of Horticulture
  - a. Identify and classify common horticultural crops.
  - b. Define horticultural terms.
  - c. Understand the role of environmental factors in horticultural production.
  - d. Identify the different areas of commercial horticulture.
3. Perform horticultural practices.
  - a. Propagation techniques.
  - b. Irrigate plants.
  - c. Fertilize plants.
  - d. Prune and train plants.
  - e. Indoor and outdoor landscape designs.
  - f. Identify and study greenhouse insects and their control.
4. Apply principles and practices of horticulture to new situations
  - a. Answer questions posed by customers.
  - b. Judge quality of plants and plant products.
5. Locate reliable sources of information of horticulture products.
  - a. Industry publications.
  - b. Internet information sites.
  - c. Industry meetings and conventions.
6. Recognize the influence of horticulture on human life.
  - a. Horticultures role in nutrition.
  - b. Horticultures role in beautification
  - c. The history of horticulture
  - d. The effects of technology of the horticulture industry.

Instructor:

Diann Beckman

Office:

Molberg Room 20

Office Hours:

MWF 1:00 -2:00 TH 10:00 – 12:00 Other hours by arrangement

Phone:

701-228-5442

Email:

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Lecture/Lab Schedule:

11:00 -12:00 MWF

Lab 1:00 – 3:00 F

Textbook:

Introduction to Horticulture

Interstate Publishing

Schrowder/Seagle/Felton/Ruter/Kelley/Krewer

Course Requirements:

Four hourly exams

Missing tests is unacceptable without prior arrangement.

Tentative Course Outline:

Week one

Chapter 1 Exploring the Horticulture Industry

Week Two

Chapter 2 & 3 Success in Horticulture, Horticulture and the Environment

Week Three

Test chapters 1-3

Week Four

Chapter 4 Plant Anatomy

Week Five

Chapter 4 Plant Anatomy

Test Chapter 4

Week Six

Chapters 5 & 6

Plant Propagation, Media, Nutrients and Fertilizers

Week Seven

Chapters 7 & 8

Plant Growth Regulators and Pest Management

Test Chapters 5-8

Week Eight  
Chapter 10 and 11  
Greenhouse Structures and Growing Greenhouse crops

Week Nine  
Chapters 12 & 13  
Test Chapters 10-13

Week Ten and Eleven  
Chapter 15 Interiorscaping

Week Twelve  
Chapters 16 – 18  
Landscape Design, Establishment and Maintenance

Week Thirteen  
Chapters 19 & 20  
Turfgrasses

Week Fourteen  
Chapters 21 & 22  
Olericulture and Pomology  
Test Chapters 15-22

Week Fifteen  
Chapters 23 & 24  
Tools and Equipment

Week Sixteen  
Chapters 24 & 25  
Electrical controls and Irrigation

Week Seventeen  
Final exam  
Weekly labs will include:  
Plant Taxonomy  
Plant Propagation (Sexual, Asexual and Micro-propagation techniques)  
Industry Safety Standards  
Proper Fertilization techniques  
Media preparation  
Pest Identification and Management  
Interiorscaping  
Landscape Maintenance  
Pruning  
Hand and Power tool identification and maintenance

General Education Goals/Objectives:

Relationship to Campus Theme:

All aspects of Horticulture develop a student's appreciation for nature and the materials that Mother Nature and technology have provided us to create with. Because of this we are able to make the world we live in a more beautiful place.

Classroom Policies:

Reading the book is the student's responsibility. Keep up with the reading assignments as we have a lot of ground to cover in a relatively short time.

Academic Integrity:

Students are expected to perform their own work. Any plagiarism or cheating will result in an automatic F for the project.

Disabilities and Special Needs:

Please inform me within the first week of class of any assistance that may be required because of a disability or special need.