Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title:
PLSC 210: Horticulture Science
Number of credits:
4 credits Fall Semester 2012
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 and become familiar with plant growth and reproduction, control of light, temperature and fertilization and methods of propagation, pruning, training and production. Students will also become familiar with the marketing of major horticulture crops.

Pre-/Co-requisites:
None

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. Irrigation.
    c. Fertilization.
    d. Pruning and training techniques.
    e. Indoor and outdoor landscape designs.
    f. Greenhouse and garden insect control.
4. Apply principles and practices of horticulture to new situations
    a. Answer questions posted 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.

Instructor:
Diann Beckman

Office:
Molberg Center; Room 20

Office Hours:
MWF 1:00-2:00 TH 10:00-12:00

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Lecture/Lab Schedule:
MWF 11:00-11:50 Lab Th 10:00-11:50

Textbook(s):
Practical Horticulture 7th Edition
Laura Williams Rice
Robert P. Rice Jr.
Prentice Hall Publishers
ISBN# 978-0-13-503866-6

Course Requirements:
Four hourly exams **(Missing tests is unacceptable without prior arrangement)**
Weekly lab assignments

Course Outline:

Week One;
Chapter One; The Green Industry and Careers in horticulture
Week Two and Three;
Chapter 2 Botanical Nomenclature, Anatomy and Physiology
Week Four;
Chapters 3-5 Plant Growth and Development, Climate and Plant Growth, Plant Propagation
Week Five;
Hourly Exam Chapters 1-5
Week Six;
Chapter 6 Outdoor soils and Fertility
Week Seven;
Chapter Seven Diagnosing and Treating Outdoor Plant Disorders
Week Eight and Nine
Chapters 8-11 Vegetable Gardening, Growing Tree Fruits and Nuts, Bush and Other Small Fruits, Flower and Herb Gardening
Hourly Exam Chapters 6-11

Week Ten;
Chapters 12-14 Home Landscape Planning, Landscape Installation and Maintenance, Lawns and Lawn Substitues
Week Eleven;
Chapter 15 Indoor Plant Maintenance
Week Twelve;
Chapters 16 and 17 Media, Fertilizers and Watering and Light and Indoor Plant Growth
Hourly Exam Chapters 12-17

Week Thirteen and Fourteen;
Chapter 18 Controlling Indoor Plant Pests and Diseases
Week Fifteen;
Chapter 19 Decorating with Growing Plants and Fresh Flowers
Week Sixteen;
Chapter 20 Greenhouse and Related Climate-Controlling structures
Week Seventeen:
Final Exam Chapters 18-20 plus random questions from the semester

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.

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 short time! **Texting, listening to music or receiving calls during class will not be allowed!!**

Academic Integrity:
You are expected to perform your 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.