Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title:
PLSC 272: Greenhouse Operations
Spring Semester 2011: 4 credits

Course Description:
Greenhouse Operations is a study of the identification and production of greenhouse crops including pot crops, cut flowers, foliage plants and bedding plants.

Course Objectives:

1. To understand the general principles of greenhouse crop production by performing germination and propagation techniques, irrigation, transplanting, fertilizing, pruning and other practices necessary to produce a saleable crop.
2. To be able to identify and learn the culture of the above greenhouse crops.
3. This course will provide an overview of the floriculture industry and how it has been affected by;
    a. Changes in production due to technology
    b. Automation in the greenhouse
    c. Environmental and legal issues
    d. Marketing techniques
    e. New introductions
    f. Dealing with the aging Baby Boomers and Generations X and Y. What will the future hold???

Instructor:
Diann Beckman

Office:
Molberg 20

Office Hours:
MWF 10:00-11:00
Other hours by arrangement

Phone:
701-228-5442

Email:
diann.beckman@dakota college.edu

Lecture/Lab Schedule:
Lecture MW 10-10:50 In the Headhouse/Greenhouse
Lab TTH 10:00 – 11:50 In the Headhouse/Greenhouse

Textbook(s):
Simon and Schuster's guide to Houseplants
Simon and Schuster Publishing

Reference Guide: Tips on Growing Bedding Plants
Ohio Florists Association Services Inc.

Course Requirements:
5 points per day are given for attendance in Lab
Weekly plant Identification tests are given on Thursday. (**You cannot make them up unless I have prior knowledge that you will not be here for the test**). Each plant is worth 4 points (2pts. Common name and 2 points Genus species)
Lecture tests will cover growing information discussed from the Tips on Growing Bedding Plants Text

Tentative Course Outline:
Week One
Introduction and foliage plant identification - List one

Week Two
Lecture: Containers and Germination
Foliage plant identification - List two
Plant ID Test -List one
Lab: seeding and transplanting

Week Three
Lecture: Plug Culture and Growing Media
Foliage plant identification – List three
Plant ID Test – List two
Lab: seeding and transplanting

Week Four
Lecture: Water quality
Test : Containers/ Germination/ Plug Culture and Germination
Foliage plant identification – List four
Plant ID Test – List three
Lab: Division and cuttings from stock plants

Week Five
Lecture: Nutrition and Irrigation
Foliage plant identification – List five
Plant ID Test – List four
Lab: seeding and transplanting

Week six
Lecture: Temperature and light
Foliage plant identification – List six
Plant ID Test – List five
Lab: cuttings from stock plants

Week Seven
Lecture:Crop Schedules
Foliage plant identification – List seven
Plant ID Test – List six
Lab: seeding

Week Eight
Test : Nutrition, Irrigation, Temperature, Light and Crop Scheduling
Foliage Plant identification – List eight
Plant ID Test – week seven
Lab: seeding

Week Nine
Lecture: Chemical Growth Regulators and Non Chemical Growth Regulators
Foliage Plant identification – List Nine
Plant ID Test – week eight
Lab: seeding

Week Ten
Spring Break

Week Eleven
Lecture: Vegetables and Herbs
Foliage plant identification – List Ten
Plant ID Test – week nine
Lab: transplanting

Week Twelve
Test: Growth Regulators, Vegetables and Herbs
Foliage Plant Identification – List 11
Plant ID Test – week ten
Lab: seeding and transplanting

Week Thirteen
Lecture: Insect and Disease Management
Foliage Plant Identification – List Twelve
Plant ID Test – week eleven
Lab: seeding and transplanting

Week Fourteen
Lecture: Production Costs and Marketing
Foliage Plant Identification – List Thirteen
Plant ID test – list twelve
Lab: transplanting

Week Fifteen
Lecture: New Cultivars
Foliage Plant Identification – List Fourteen
Plant ID test – Week Thirteen
Lab: transplanting

Week Fifteen
Foliage Plant Identification – List Fifteen
Plant ID test – Week Fourteen
Lab: transplanting

Week Sixteen
Plant ID test – Week fifteen
Transplant efficiency test

Week Seventeen
Final test – Insect and Disease management and New Cultivars
Final Comprehensive plant ID Test 50 Random Samples from the semester

Relationship to Campus Theme:
Greenhouse crops have influenced nature since the early 1900's. In the last 40 years however, there has been an amazing transformation to meet demand. The industry has grown from total hands on to almost total automation in many greenhouses and the consumers mentality has changed from, I want to be outside with nature and do it myself because this is my hobby and this is what I love to do, to I want someone else to do it for me so I can bring it home and sit in my chair with a glass of wine and enjoy looking at it. I don't want to be involved in any part of the process except relaxation. We must look beyond (into the future) and try reading these consumers thoughts in order to keep our share of the consumer dollars.

Classroom Policies:
Students are expected to be in attendance.
No Texting or personal calls in class!!!!!!!!!!!!!!!!!!!!
No Makeup on ID tests; unless you call or let me know ahead of time that you will be gone.
Dress appropriately for the working conditions. (Don't dress up!)

Disabilities and Special Needs:
Students should let me know the first week of class if there are any special arrangements that need to be addressed due to disabilities or special needs.