

## **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:**

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### **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.