

## **Dakota College at Bottineau Course Syllabus**

### **Course Prefix/Number/Title:**

PLSC 272: Greenhouse Operations  
Spring Semester 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 11:00 12:00

Lab TTH 10:00 – 12:00

**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  
Chapters 1-5  
Chapters 6-10  
Chapters 11-14  
Chapters 15-19  
100 points each

**Tentative Course Outline:****Week One**

Introduction and foliage plant identification - List one

**Week Two**

Chapters 1 & 2 Containers and Germination  
Foliage plant identification - List two  
Plant ID Test -List one  
Lab: seeding and transplanting

**Week Three**

Chapters 3 & 4 Plug Culture and Growing Media  
Foliage plant identification – List three  
Plant ID Test – List two  
Lab: seeding and transplanting

**Week Four**

Chapter 5 Water quality  
Test Chapters 1-5  
Foliage plant identification – List four  
Plant ID Test – List three  
Lab: Division and cuttings from stock plants

**Week Five**

Chapter 6 & 7 Nutrition and Irrigation  
Foliage plant identification – List five  
Plant ID Test – List four  
Lab: seeding and transplanting

#### Week six

Chapter 8 and 9 Temperature and light

Foliage plant identification – List six

Plant ID Test – List five

Lab: cuttings from stock plants

#### Week Seven

Chapters 10 Crop Schedules

Foliage plant identification – List seven

Plant ID Test – List six

Lab: seeding

#### Week Eight

Test Chapters 6-10

Foliage Plant identification – List eight

Plant ID Test – week seven

Lab: seeding

#### Week Nine

Chapters 11 & 12 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

Chapters 13 & 14 Vegetables and Herbs

Foliage plant identification – List Ten

Plant ID Test – week nine

Lab: transplanting

#### Week Twelve

Test Chapters 11-14

Foliage Plant Identification – List 11

Plant ID Test – week ten

Lab: seeding and transplanting

#### Week Thirteen

Chapters 15 & 16 Insect and Disease Management

Foliage Plant Identification – List Twelve

Plant ID Test – week eleven

Lab: seeding and transplanting

Week Fourteen

Chapters 17 and 18 Production Costs and Marketing

Foliage Plant Identification – List Thirteen

Plant ID test – list twelve

Lab: transplanting

Week Fifteen

Chapter 19 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

Week Seventeen

Final test – Chapters 15-19

Final Comprehensive plant ID Test

### **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 read these consumers thoughts in order to keep our share of the consumer dollars.

### **Classroom Policies:**

Students are expected to be in attendance.

Cell phones should be off.

No make-up plant 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.