



Course Prefix/Number/Title: HORT 235: Herbaceous Landscape Plants

Credits: Four

Course Description:

Students will study production, identification and uses of annual, perennial and bulbous ornamentals in home and public landscapes with consideration to cultural requirements and insect and disease problems.

Herbaceous Landscape Plants involves the study of Herbaceous Ornamental Plants such as flowering annuals, biennials, perennials, bulbous plants and herbs. Consideration is given to methods of propagation, adaptability and landscape value. Garden insects and diseases are also covered. Students will be expected to identify various plants by Family, Common Name and Genus species.

Pre-/Co-requisites: None

Course Objectives:

Students will be expected to be competent in the following areas.

1. Identify, describe, and name many common herbaceous annuals and perennials.
2. Growth requirements such as proper soil mixtures and watering techniques for growing bedding plants in the greenhouse and outdoors.
3. Identification and control of common greenhouse and garden insects and diseases
4. Plant maintenance
5. Selecting annual and herbaceous perennials for specific landscape applications
6. Plan and Present Herbaceous Plant Landscape Designs to customers/employers

Instructor: Keith Knudson

Office: Molberg Center # 26

Office Hours: By appointment

Phone: 701-228-5489

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Lecture/Lab Schedule: MW 10:00am- 11:15am; Lab at International Peace Gardens time TBD

Labs will meet at a location to be determined.

Textbook(s): (recommended as a reference document)

Armitage's Manual of Annuals, Biennials and Half-Hardy Perennials Timber Press -Published in 2002
ISBN 0-88192-505

Course Requirements:

6 Plant ID and Cultural Quizzes (50pts each)

Other Weekly Quizzes (20 pts each)

Weekly Lab Assignments/participation (10 pts each)

Midterm Plant ID and Cultural Exam (150 pts)

Lab Identification Midterm Exam (50 pts)

Class participation (10pts each)

Class Exercises (20 pts each)

Design Assignments (50 pts each)

Final Lecture Exam (100 pts)
 Lab Plant Identification Final Exam (75 pts)
 Assigned Design Class Presentation (30 pts)
 International Peace Garden Field Trip Participation (60 pts)

GRADING: Grading is based on a standard college curve, where students earn a grade based upon the percent of total possible points they obtain. Letter grades are assigned based on the following criteria:

- A = 90-100% of the total points**
- B = 80-90% of the total points**
- C = 70-80% of the total points**
- D = 60-70% of the total points**
- F = <60% of the total points**

***The instructor reserves the right to modify this syllabus and course requirements at any time.**

*** Note there will be scheduled a *mandatory all-day field trip to the International Peace Garden**

**** Travel to the International Peace Garden. Mandatory attendance.**

(Identification required is a minimum of an official birth certificate and photo ID. A passport or passport card is preferred).

Tentative Course Outline

| Week/Unit | Topics and Assignments |
|--|---|
| 1 Unit 1: Plant names and Online Plant Resource | Lecture: Memorization Skills - learning the plant names successfully, Plant Names and Online Plant resources Week 1 Plant List Reading: Latin Linguistics - A Useful Tool in Horticulture-ISU Extension Memorization Strategies Exercise: See BlackBoard Page Plant Name Exercise: See BlackBoard Page Lab |
| 2 Unit 2: Plant Identification and Identifying Characteristics Quiz 1 | Quiz 1- Week 1 Plant List Lecture: Plant Structure and Characteristics useful for Plant ID Week 2 Plant List Reading: Get to Know the Plants in Your Yard with These Plant ID Tips Plant Description and Identification Exercise: See BlackBoard Page |

| Week/Unit | Topics and Assignments |
|---|---|
| 3 Unit 3: Plant Identification and Plant Families Quiz 2 Field Trip to the International Peace Garden-All Day September 13th | Quiz 2 -Week 2 Plant List Lecture: Plant Families Watch: Botany in a Day Tutorial, https://youtu.be/D1DePIU15z4 Week 3 Plant List Reading: http://theseedsite.co.uk/families.html Plant Families exercise: See BlackBoard Page Lab: Field Trip to the International Peace Garden Travel to the International Peace Garden. Mandatory attendance. (Identification required is a minimum of an official birth certificate and photo ID. A passport or passport card is preferred). We will leave campus at 9am and return by 3pm. You will need to bring a sack lunch. This is a mandatory Trip. I will let your other instructors know beforehand to excuse you from any classes you may miss. If there is a conflict that cannot be resolved, you must let me know at least 2 weeks before the trip. |
| 4 Unit 4: Plant Identification and Native, introduced, invasive and adapted plants Quiz 3 | Quiz 3 -Week 3 Plant List Lecture: Native, adapted, introduced, and invasive plants. Week 4 Plant List Reading: Living Landscapes in North Dakota: A GUIDE TO NATIVE PLANTSCAPING Native Plants exercise: See BlackBoard Page Lab |
| 5 Unit 5: Plant Identification and Pollinator, birds and biodiversity plant selections Quiz 4 | Quiz 4 -Week 4 Plant List Lecture: Plants for pollinators, birds and biodiversity Video: Great Gardening - Bees and Pollinators https://youtu.be/h8iCEf72ypU People, Plants and Pollinators Nat Geo Live https://youtu.be/rmL_XTrPOMw Week 5 Plant List Reading: Bee-utiful Landscapes: Building a Pollinator Garden; Butterfly Gardening in North Dakota Biodiversity exercise: See BlackBoard Page Lab: |
| 6 Unit 6: Plant Identification and Hardiness zones Quiz 5 | Quiz 5 -Week 5 Plant List Lecture: Plant Hardiness Zones Week 6 Plant List Reading: Explore the NOAA website, https://www.noaa.gov/ Hardiness Exercise: See BlackBoard Page Lab |
| 7 Review Week Quiz 6 | Quiz 6 -Week 6 Plant List Lecture: Review for Plant Identification Exam, Plant Cultural Information Exam Master Plant List Lab Exam Review Video and Worksheet “Killing Your Lawn and Opting for More Biodiversity” Webinar https://youtu.be/KG1_iR-scLE Lab: No lab |
| 8 Midterm Exam | Plant Identification Exam Lab Identification Exam |

| Week/Unit | Topics and Assignments |
|---|--|
| 9 Unit 7: Containers for herbaceous annuals and perennials | Lecture: Container Basics Video: Advanced Container Gardening https://youtu.be/SeTB5EEN64E Container design and plant selection assignment: See BlackBoard Page Lab |
| 10 Unit 8: Green Infrastructure: Landscape features for stormwater management Quiz 7 | Quiz 7: Week 9 Container Basics Lecture: Stormwater management in the landscape, Rain Gardens Readings: Landscape designs for Stormwater management; Rain Gardens- Capturing and Using the Rains of the Great Plains; Rain Gardens a how-to manual for homeowners https://youtu.be/jBctNSWgma0 Raingarden design assignment: See BlackBoard Page Lab |
| 11 Unit 9: Annual bedding lesson and cultivar selection Quiz 8 | Quiz 8: Stormwater management in the landscape, Rain Gardens Lecture: Annual bedding plants Video: Crop Scheduling of Bedding Plants https://youtu.be/2AHHDKgJL-o Reading: Annual and Perennial Flowers for North Dakota-NDSU Extension Annual Cultivar Selection Exercise: See BlackBoard Page Annual bed, herbaceous perennial bed, or mixed border assignment Lab |
| 12 Unit 10: Perennial plant lesson and cultivar selection Quiz 9 | Quiz 9: Annual bedding plants Lecture: Perennial beds and mixed borders, Video: Gardening with Summer Perennials https://youtu.be/OYdFwn0qq6A Reading: Planting Border Perennials Perennial cultivar selection exercise: See BlackBoard Page Annual bed, herbaceous perennial bed, or mixed border assignment Lab |
| 13 Unit 11: Rock Gardens, Vines and Ground Cover Quiz 10 | Quiz 10: Perennial beds and mixed borders Lecture: Rock Gardens, Vines and Ground Cover Video: “Rock Garden Nation” https://youtu.be/COUBkn16228 Readings: When America Was Crazy About Rock Gardens _ NPR History Dept. _ NPR Intro to Rock Gardening _ North American Rock Garden Society Rock Garden/vines and ground cover design assignment: See BlackBoard Page Lab |
| 14 Unit 12: Integrated Pest Management Quiz 11 | Quiz 11: Rock Gardens, Vines and Ground Lecture: Identification and control of common greenhouse and garden insects and diseases and IPM methods. Video: TBD Reading: TBD Lab |
| 15 Review Week Presentations: Quiz 12 | Quiz 12- Identification and control of common greenhouse and garden insects and diseases and IPM methods Lecture: Review Units 10-14 This week you will be presenting one of your design assignments to the class. The presentation should be done in power point or some other presentation software and should include all the basic elements in your submission for that assignment. Lab Exam Review Perennials vs Annuals |
| 16 Final Exams | Lecture Final Exam: Weeks 10-14 Lab Plant Identification Final Exam: Perennials vs Annuals |
| Finals Week | Design projects Due |

CTE Competency/Department Learning Outcome(s):

- Employ industry-specific skills in preparation for workplace readiness
- Combine general education and vocational skills curriculum
 - Horticulture LO 2. Develop human relation skills.

Relationship to Campus Focus:

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: Show respect to all living things!!!

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:

Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

