

Course Prefix/Number/Title: **PLSC 223 Introduction to Weed Science**

Number of Credits: 3

Course Description:

Introduction of a basic knowledge of weeds, herbicide groups, the use of pesticides, economic and environmental considerations, personal safety, modes of action and terminology. Safe application of pesticides and to prepare students to obtain a private or commercial pesticide applicators license.

Pre-/Co-requisites: none

Course Objectives:

- Identify weed plants by seed, vegetative, and reproductive stages.
- Describe weed management options.
- Explain factors associated with application and dissipation of pesticides in the environment.
- Explain the concepts and issues associated with herbicide resistance.
- Identify herbicide groups and families within each mode of action.
- Explain major herbicide modes of action.
- Explain regulatory aspects of weed control.
- Demonstrate an understanding of safe and accurate application of pesticides.
- Demonstrate understanding of pesticide labels and labelling.
- Analyze and understand pesticide calibration formulas and equipment.
- Prepare students to take the North Dakota Commercial Pesticide Applicator License Exam

Instructor: Joseph Pancoast

Office: Molberg 21

Office Hours: M W F 10:00am-11:00am or by appointment

Email: joseph.pancoast@dakotacollege.edu

Lecture Schedule: T R 9:30am-10:45am

Textbook(s):

Physical Copies:

-Bryson, CA. 2010. Weeds of the Midwestern United States and Canada. University of Georgia Press.

-Official NDSU Study Materials for Commercial/Public/Dealer Pesticide Certification Exams

<https://extpest-northdakotastate-ndus.nbsstore.net/study-materials-for-commercial-certification-exams>

Online (no cost):

-Deana Namuth-Covert and Amy Kohmetscher. Principles of Weed Control. Ohio State – Agricultural Technical Institute College of Food, Agricultural and Environmental Sciences. The Ohio State University. Pressbooks. <https://ohiostate.pressbooks.pub/crpsoil2422t/>

-MANAGE WEEDS ON YOUR FARM: A GUIDE TO ECOLOGICAL STRATEGIES. Charles L. Mohler, John R. Teasdale and Antonio DiTommaso.

<https://www.sare.org/resources/manage-weeds-on-your-farm/>

Course Requirements:

Students' knowledge and understanding of the reading and supplemental materials will be assessed through exams, critical thinking assignments, assignments, and presentations. Grading is based on a standard curve, where students earn a grade based upon the percent of total possible points they obtain. Although, slight modification may occur based on the discretion of the instructors. Any missed exam or assignment not submitted in the allotted time will be given a zero (10% will be deducted every day then a zero will be given on day seven). Note: Late work allotted time is reduced for any assignment or exam at the end of the semester.

Tentative Course Outline: **Schedule and assignments and percentages are subject to change.**
Laboratory exercises and assignments will be incorporated into the lecture periods.

Requirement	Percentage
Critical Thinking Assignments	20%
Lab/Worksheets/Presentations	40%
Tests(Core Knowledge & Weed Identification)	40%
Total	100%

Letter Grade	Points (Percent)
A	(89.5% - 100%)
B	(79.5% - 89.4%)
C	(69.5% - 79.4%)
D	(59.5% - 69.4%)
F	(<59.5%)

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s): This course meets the CTE department learning outcome of employing industry-specific skills in preparation for workplace readiness by:

1. Expanding critical thinking competence
 - a. Understand global and social interdependencies as they relate to agriculture and food crops.
 - b. Describe the important factors in plant health, growth, and nutrient density.
 - c. Discuss benefits and consequences of the evolution of our food system from production to consumption.

Relationship to Campus Focus:

This course is part of our Agricultural Management and Technology Program and it addresses the campus theme of Nature, Technology, and Beyond through learning about natural resources and how best to utilize each resource. Its associated technology is discussed and demonstrated.

Classroom Policies:

1. Please no hot food in the classroom. Its delicious aroma would be distracting for the instructor and other students. 😊
2. Attend classes and especially labs on time. If late or missing lab points may be deducted.

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.

AI Student Policy:

Unless otherwise indicated in the course syllabus, or in individual instructions for course assignments, or in the absence of the express consent of the course instructor, students are not allowed to utilize generative AI to help produce any of their academic work. Any violation of this policy will be considered an act of academic dishonesty as outlined within the Dakota College Code of Student Life.