



**HORT 152 Integrated Pest Management**

**Number of Credits:** 3

**Course Description:**

This course provides students with the knowledge and tools necessary to identify various pests found in specialty crops. Subjects covered include identification techniques, scouting methods, sampling methods and thresholds.

**Pre-/Co-requisites:** None

**Course Objectives:**

- Learn concepts of the Integrated Pest Management (IPM) system
- Identifying the components of an integrated management system
- Identify the common pests
- Identify common signs left by pests

**Instructor:** Keith Knudson

**Office:** NA

**Office Hours:** By Appointment

**Phone:** 701-228-5489

**Email:** Keith.a.knudson@dakaotacollege.edu

**Lecture/Lab Schedule:** Online

**Textbook(s):**

No text book is required, but students will be provided reading and supplement materials by the instructor.

**Course Requirements:**

Online courses require the following to build and engage a classroom community of learners:

- Log in to the course a minimum of three times per week to check for new announcements and course information.
- Read the assigned texts and papers. It is essential to success in this course.
- Complete and submit coursework on time.
- Pace yourself, and make sure that all assignments are completed by the end of the semester.
- Communicate with the instructor.

Must earn 377 of the 530 possible points to pass the course.

Any missed quiz, exam or assignment not made up within the allotted time will be given a zero. The “allotted time” given is at the discretion of the instructor and will be communicated to the students throughout the course. (Note: It is the responsibility of the student to schedule make-up work with the instructor at a time convenient to both parties.)

Quiz (50 pts each)  
 Assignment (30pts each)  
 Discussion Board (30 pts each)  
 Final Project (100 pts)

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

**\*\*There is at least one item due every week on the course!**

**Tentative Course Outline:**

Week	Topic and Assignments
Week 1 Pests, Plants and Soil IPM Scouting and Monitoring	Watch: <ul style="list-style-type: none"> <li>• Pests, Plants and Soil Lecture (YouTube)</li> <li>• IPM Scouting and Monitoring Lecture (YouTube)</li> </ul> Review: <ul style="list-style-type: none"> <li>• Pests, Plants and Soil PPT</li> <li>• IPM Scouting and Monitoring PPT</li> </ul> Read: <ul style="list-style-type: none"> <li>• Integrated Pest Management Chapter 1</li> <li>• Scouting Vegetables for pests-Delahaut</li> </ul> <b>Week 1 Discussion Forum due (30 pts)</b>
Week 2 Pest Identification IPM Practices	Watch: <ul style="list-style-type: none"> <li>• Pest Identification Lecture (YouTube)</li> <li>• IPM Practices Lecture (YouTube)</li> </ul> Review: <ul style="list-style-type: none"> <li>• Pest Identification PPT</li> <li>• IPM Practices PPT</li> </ul> Read: <ul style="list-style-type: none"> <li>• INTRODUCTION TO INTEGRATED PEST MANAGEMENT-CropLife</li> </ul> <b>Week 2 Discussion Forum due (30 pts)</b>
Week 3 Insects	Review: <ul style="list-style-type: none"> <li>• Insect Identification PPT</li> </ul> Read: <ul style="list-style-type: none"> <li>• IPM Definition</li> <li>• IPM Benefits</li> <li>• IPM General Checklist</li> <li>• The Common Garden Pests of Leafy Greens</li> </ul> <b>Week 3 Discussion Forum due (30 pts)</b> <b>Week 3 Assignment due (30 pts)</b> <b>Week 3 Quiz due (50 pts)</b>
Week 4 Rodents	Review: <ul style="list-style-type: none"> <li>• Rodents PPT</li> </ul> Watch: <ul style="list-style-type: none"> <li>• Dueling with Diggers: Gophers, Moles, Voles and Ground Squirrels -OSU Extension</li> </ul> Read: <ul style="list-style-type: none"> <li>• Pocket Gophers-UC IPM</li> <li>• Mole- UC IPM</li> </ul>

	<ul style="list-style-type: none"> <li>• Voles- UC IPM</li> </ul> <p><b>Week 4 Discussion Forum due (30 pts)</b></p>
<p>Week 5 Birds and Wildlife</p>	<p>Review:</p> <ul style="list-style-type: none"> <li>• Birds and Wildlife PPT</li> </ul> <p>Watch:</p> <ul style="list-style-type: none"> <li>• IPM for Wildlife Damage</li> <li>• Whole Farm IPM - Habitats for Birds &amp; Other Predators</li> </ul> <p>Read:</p> <ul style="list-style-type: none"> <li>• Rabbits-UC IPM</li> <li>• An Introduction to Wildlife Management- UW Extension</li> <li>• THE BEST CONTROL FOR BIRDS</li> <li>• Preventing Bird Damage to Fruits-Perry</li> </ul> <p><b>Week 5 Quiz due (50 pts)</b></p>
<p>Week 6 Weeds</p>	<p>Review:</p> <ul style="list-style-type: none"> <li>• Weed Identification PPT</li> <li>• Weed Management PPT</li> </ul> <p>Watch:</p> <ul style="list-style-type: none"> <li>• Why Weed IPM Matters- UNH Extension</li> </ul> <p>Read:</p> <ul style="list-style-type: none"> <li>• Weed Management in Landscapes-UC IPM</li> </ul> <p><b>Week 6 Discussion Forum due (30 pts)</b></p>
<p>Week 7 Pathogens</p>	<p>Review:</p> <ul style="list-style-type: none"> <li>• Pathogens PPT</li> </ul> <p>Watch:</p> <ul style="list-style-type: none"> <li>• Preparing for Battle Against Diseases- NDSU Extension</li> </ul> <p>Read:</p> <ul style="list-style-type: none"> <li>• IPM Basics-NDSU Extension</li> <li>• Disease Management in the Home Vegetable Garden- UMass Extension</li> </ul> <p><b>Week 7 Quiz due (50 pts)</b></p>
<p>Week 8 Final Project</p>	<p><b>Final Project Due (100 pts)</b></p>

**CTE Competency/Department Learning Outcome(s):**

- Employ industry-specific skills in preparation for workplace readiness
- Combine general education and vocational skills curriculum
  - Horticulture LO 1. Attain level of technical skills and practices used in Horticulture Industry in preparation for workplace readiness.

**Relationship to Campus Focus:**

This course supports the campus theme of “Nature, Technology and Beyond” by fostering the skills and knowledge necessary to utilize natural, human and technological resources successfully and confidently.

**Classroom Policies:**

This academic environment is open and harassment free. Always be respectful of other students and the instructor.

**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.

**Plagiarism:**

The strength Dakota College at Bottineau depends on academic and personal integrity. In this course, you must be honest and truthful. Plagiarism is the use of someone else’s work, words, or ideas as if they were your own. Here are three reasons not to do it:

- By far the deepest consequence to plagiarizing is the detriment to your intellectual and moral development: you won’t learn anything, and your ethics will be corrupted.
- Giving credit where it’s due but adding your own reflection will get you higher grades than putting your name on someone else’s work. In an academic context, it counts more to show your ideas in conversation than to try to present them as *sui generis*.
- **This means absolutely not cut and pasting directly into your assignment from other sources. I want everything is your own words!**
- Finally, all students are expected to adhere to the highest standards of academic integrity. Students must complete all work themselves. Cheating or plagiarism is a serious offense and is subject to disciplinary action by the instructor and the college administration. Please be sure to review the **Student Handbook**. **The consequences of plagiarism in this class depend on the level exhibited, but are at a minimum a failing grade on the assignment up to failing the class.**

**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.