

**Course Prefix/Number/Title:** HORT 245 - Safe Post-Harvest Handling

**Number of credits:** 1 Semester Credit

**Course Description:** Introduction to safe post-harvest handling or good handling practices (GHP) using appropriate production practices, careful harvesting, and proper packaging, storage, and transportation. Course covers practices suitable for small-scale operations, and points out the importance of production and harvesting techniques for improving quality and storability.

**Objectives:**

1. Learn and understand basic principles of safe post-harvest handling practices.
2. To understand and recognize the risks involved wherever water comes into contact with fresh produce and how its quality dictates the potential for pathogen contamination.
3. Create conditions that prevent food safety hazards instead of corrective actions taken after a risk has been identified.
4. Identify proper storage and transportation practices.

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

**Instructor:** Keith Knudson

**Office:** 519 Main Street, Suite 5; Bottineau, ND 58318; Bottineau Tech Center

**Office Hours:** 11 AM 4:50 PM – MWF or by appointment

**Phone:** 701-228-2160

**Email:** Keith A Knudson

**Lecture/Lab Schedule:** Two Thursdays – 8 hours each day.

**Textbook(s):** *Food Safety Basics* - Julie Garden-Robinson – NDSU Bulletin FN-572

**Course Requirements:** Grading will be based on the following to obtain points. There will be 5 lecture quizzes each worth 30 points; farm plan is worth 200 points and a final exam worth 150 points. Total possible points for the course are 550. The final grade is based on the following criteria:

A = 89.5% to 100% of the total points  
B = 79.5% o < 89.5% of the total points  
C = 68.5% to <79.5% of the total points  
D = 59.6% to <69.5% of the total points  
F = < 59.5% of the total points

**Tentative Course Outline:**

	Hours
- Introduction	(0.5)
- Preharvest Assessment	(1.0)
- Field Sanitation Practices	(1.5)
- Harvest Tools and containers	(1.5)
- Harvest methods	(1.0)
- Packing facilities	(1.0)
- Employee field and packing house practices	(1.0)
- Packaging	(0.5)
- Temperature	(0.5)
- Cooling Methods	(1.0)
- Chilling Injury	(0.5)
- Preventing Moisture Loss	(0.5)
- Sanitation	(1.0)
- Mixed Loads	(1.0)
- Storage Crops	(1.0)
- Pest Management	(1.0)
- Resources	(0.5)
- Exam	(1.0)
- TOTAL	(16.0)

**General Education Goals/Objectives**

Not Applicable

**Relationship to Campus Theme:**

This course is part of our Sustainable Vegetable Production program and it addresses the campus theme of Nature, Technology and Beyond by learning about our natural resources and how best to utilize each resource. GHP bring out the best in vegetables with safe and great tasting foods.

**Classroom Policies:**

1. Cell phones, iPods and related technology are prohibited in the classroom at all times. It is recommended that you do not bring your cell phone into the classroom or, at the very least, turn it off.
2. Food and beverages are permitted in accordance with IVN classroom policy.
3. Be respectful of other students, instructors and guests.

**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:**

All students are expected to adhere to the highest standards of academic integrity. Dishonesty in the classroom or laboratory and with assignments, quizzes and exams is a serious offense and is subject to disciplinary action by the instructor and college administration. For more information, refer to the student handbook.

**Disabilities and Special Needs:**

If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact your instructor and Jan Nahinurk in the Learning Center (701-228-5479) as early as possible during the beginning of the semester.