

Dakota College at Bottineau Course Syllabus

Course Prefix/Number/Title: **HORT 127 Aquaponics Practicum III**

Number of credits: 1 to 4

Course Description: Course provides students with hands-on experiences in a greenhouse environment. Students will work with daily operations of management techniques, water quality dynamics, greenhouse, and environmental controls, aquaponics start-up and operational costs, regulations, marketing and financial planning.

Pre-/Co-requisites: Practicum I and Practicum II

Course Objectives:

- Develop an understanding of issues relating to water quality for fish and plant life. Maintain parameters established for dissolved oxygen, ammonia, nitrite, carbonate, alkalinity, pH, water temperature, total dissolved solids and nutrient base.
- Monitor and adjust greenhouse environment on a daily basis to ensure maximum production needs of fish and plant life.
- Understand the importance of recordkeeping for food safety, financial and worker safety.
- Assist in scheduling of crop and fish rotations as determined by market demands.

Instructor: Keith Knudson

Office: Room 26, Molberg Center

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

Phone: 701-228-5489

Email: keith.knudson@dakotacollege.edu

Lecture/Lab Schedule: TBD – Aquaponics Greenhouse

Textbook(s): None

Course Requirements: Grading is based on student's ability to demonstrate practices relating to the course objectives.

The final grade is based on the following criteria:

A = 89.5% to 100% of the total points

B = 79.5% to < 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:

- Daily management of operations
- Supervisory responsibilities
- Maintaining environment requirements and understanding trends in environmental data
- Creating business planning expansion activities
- Maintaining records critical to the success of the business.
- Crop and fish production schedules and rotations
- Field trips

General Education Goals/Objectives: Students should follow the Aquaponics Program curriculum.

Relationship to Campus Theme: This course is part of our Aquaponics Production and Management 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. The latest technology is discussed and demonstrated.

Classroom Policies:

1. Cell phones, iPods and related technologies use are prohibited in the classroom unless otherwise instructed. It is recommended that you do not bring your internet/cellular device into the classroom if it interrupts you or your fellow student in the course that you have purchased, as you will not receive the value you should expect in order to excel in the area of study.
2. Food and beverages are permitted in accordance with IVN classroom policy.
3. Be respectful of other students, instructor 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 excel to the best of their ability. Students must 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 the Learning Center (701-228-5479) as early as possible during the beginning of the semester