

COURSE DESCRIPTION

In this course, students will study the science of freshwater aquatic ecosystems and the organisms found there. Students will learn about the properties of water, water systems, macroinvertebrates, aquatic species, and the production and marketing of these organisms. Students will learn the biology of various aquatic organisms, identification methods, and habitat requirements by designing and operating an aquatic system in the aquatics lab. Students will participate in the management and care of the lab and all species grown there.

ACADEMIC PLANNING

This course satisfies one of the four Science credits required for graduation.

PREREQUISITE: CASE- AFNR or has taken or is currently taking Biology

FREQUENCY: SEMESTER/DAILY

STANDARDS

- [CASE NRE Standards](#)

UNITS

- Aquarium Set Up Unit
- CASE NRE Unit 3.1 Water Basics
- CASE NRE Unit 3.2 Water Function
- Water Quality Unit
- Soil and Water Conservation Unit
- Aquatic Macroinvertebrates
- Aquaculture Species Unit
- Invasive Species Unit
- Wetlands and Watersheds Unit
- PA Coldwater Fish Unit
- PA Warmwater Fish Unit
- PA Panfish Unit
- PA Migratory Fish Unit
- PA Other Fish Unit
- PA Reptiles and Amphibians Unit
- Freshwater Tidal Estuaries Unit
- Coral Reefs Unit

KEY RESOURCES

- Plant & Soil Science: Fundamentals & Applications
- Introductory Horticulture, 7th Edition
- The Commercial Greenhouse, 3rd Ed.

ASSESSMENTS & GRADING

Class Participation

Weekly Aquatics Room and Tank Grade

End of Unit Tests,

Unit Related Projects

Class Activities and Laboratories

Quizzes as needed

ATTENDANCE POLICY

Twin Valley School District's attendance policy can be found in the [TVHS Student Handbook](#).

ELECTRONIC DEVICE POLICY

Twin Valley School District's Electronic Device Policy can be found in [School Board Policy 237](#). Additional information can be found in the [TVHS Student Handbook](#).

ACCOMMODATIONS STATEMENT

The Twin Valley School District has a longstanding commitment to the inclusion of students requiring specially-designed instruction within the general education environment to the extent appropriate for the individual child. Twin Valley School District implements a co-teaching model at levels in which general and special education teachers plan and provide instruction within a general education class so that instruction is differentiated to meet the educational needs of all students. These co-taught classes increase learning opportunities and success within the least restrictive environment.

ACADEMIC POLICIES & PROCEDURES

Twin Valley School District values academic integrity. The following information regarding cheating/plagiarism can be found in the [TVHS Student Handbook](#): "Students involved in cheating, plagiarism, and/or unauthorized copying of schoolwork or other educational material will receive no credit for the particular test or assignment, or other actions at the discretion of the teacher. More severe or involved offenses may result in disciplinary actions by the school administration." Additional High School Academic information can be found on their [Program of Studies Website](#).