## **Syllabus**



VIN 111 Fundamentals of Variable Climate Viticulture 3 Credit Hours (Lecture) Prerequisites: None

Revision Date: 12/09/22

### **Department:**

Viticulture and Enology

## **Course Description:**

This course is designed to introduce students to current practices for establishing a commercial vineyard and maintaining its health and productivity. Topics include varietal selection, site selection, site preparation, equipment, first season establishment, vine growth development and training, trellis systems, and pest identification and control.

### **Course Competencies:**

Upon completion of the course, the student should be able to:

- 1. Understand the types of grape varieties commercially grown in various growing regions.
- 2. Identify and describe vine anatomy.
- 3. List and describe bud and shoot stages.
- 4. Differentiate between one-season old wood and older wood.
- 5. Identify proper vine training and canopy management procedures.
- 6. Demonstrate proficiency in stock selection, proper planting methods, and post-planting care.
- 7. Identify major grape pests and understand pest management strategies.
- 8. List the requirements of the state pesticide certification program.
- 9. Demonstrate the proper interpretation of pesticide labels as they apply to legal, civil, and safety issues.
- 10. List nutrients needed for healthy vine development.
- 11. Take a soil sample according to the recommendations of a Soil Testing Lab.
- 12. Describe the process of implementing a soil fertility plan, including timing and application methods.
- 13. Identify and describe commonly used trellis systems.
- 14. Evaluate site selection concepts such as aspect, drainage, plant hardiness zone, and slope.
- 15. Demonstrate the use of a Gantt diagram to schedule seasonal vineyard tasks.
- 16. Identify grape purchase contracts and vineyard leases.
- 17. Produce a vineyard plan.
- 18. Determine establishment costs and analyze return on investment.

#### **Course Content:**

- A. Wine Grape Varieties and Rootstocks
- B. Vine Structure and Annual Growth Cycle
- C. Vineyard Site Selection
- D. Trellis and Vine Training Systems
- E. Vineyard Design and Establishment
- F. Vineyard Pests and Management Strategies
- G. Vine Mineral Nutrition
- H. Grapevine Water Management
- I. Canopy Management

- J. Yield Estimation, Crop Management, and Harvest
- K. Contracts and Leases
- L. Costs and Returns of Vineyard Establishment and Operation

# **Learning Assessments:**

Competencies may be evaluated by multiple measures, including written examination, field observations, research, article reviews, research, projects, and experiments.

### **Instructional Materials:**

Dami, I., Bordelon, B., Ferree, D. C., Brown, M., Ellis, M. A., Williams, R. N., & Doohan, D. (2005). *Midwest Grape Production Guide*. Bulletin 919. Publisher: Ohio State University Extension. ASIN: B002SE1E6K. This is a free download at:

https://plantpathology.ca.uky.edu/files/mw grape productn b919.pdf

Goldammer, T. (2018). *Grape Grower's Handbook: A Guide to Viticulture for Wine Production* (Third Edition). Apex Publishers. Centreville, VA. ISBN: 978-0-9675212-5-1

Wolf, T. K. (2008). *Wine Grape Production Guide for Eastern North America*. Natural Resource, Agriculture & Engineering Service (NRAES) Cooperative Extension. ISBN-13: 978-19-3339-512-8. This is a free download at: https://ecommons.cornell.edu/handle/1813/67189

#### Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" on our <u>Disability Services</u> website.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

#### A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an online report about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our <u>Equity Grievance Policy</u>.