

VIT 123 Course Outline as of Fall 2015**CATALOG INFORMATION**

Dept and Nbr: VIT 123 Title: SPRING BUD & GRAFT
 Full Title: Spring Budding & Grafting
 Last Reviewed: 9/27/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	0.50	Lecture Scheduled	9.00	1	Lecture Scheduled	9.00
Minimum	0.50	Lab Scheduled	0	1	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	9.00		Contact Total	9.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 18.00

Total Student Learning Hours: 27.00

Title 5 Category: AA Degree Applicable
 Grading: Grade or P/NP
 Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
 Also Listed As:
 Formerly: AG 281.10

Catalog Description:

Spring season budding and grafting. Covers methods used to graft over rootstocks and in existing vineyards.

Prerequisites/Corequisites:**Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:**Schedule of Classes Information:**

Description: Spring season budding and grafting. Covers methods used to graft over rootstocks and in existing vineyards. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:		Effective:	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Explain the physiology of callus formation for grafting/budding success.
2. Describe various budding and grafting methods, including a recommendation for each as to the appropriateness of choice and the proper timing.
3. Demonstrate effective chip budding techniques.
4. Recognize scion-rootstock incompatibility and take appropriate action.

Objectives:

Upon completion of this course, students will be able to:

1. Differentiate between sexual and asexual propagation.
2. Compare and contrast various grapevine propagation methods.
3. Discuss the purpose of budding and grafting for vineyard production.
4. Describe various budding and grafting methods used to graft over rootstocks or existing vineyards and discuss the advantages and disadvantages of each.
5. Describe the physiology and morphology of internal and external budwood structures.
6. Determine compatibility of vine and rootstock to avoid grafting failure.
7. Store and sanitize budwood.
8. Properly prepare rootstocks and vines for budding and grafting.
9. Practice appropriate post grafting plant care.

Topics and Scope:

- I. Grapevine Propagation
 - A. Sexual
 - B. Asexual
- II. Overview of Grapevine Propagation Methods
- III. Purpose of Budding and Grafting
- IV. Budding and Grafting Methods

- A. Field budding
- B. "T" budding
- C. Grafting
- D. Bench grafting
- E. Advantages and disadvantages of each method
- V. Budwood
 - A. Physiology and morphology of budwood
 - 1. External structure
 - 2. Internal structure
 - B. Collection
 - C. Sanitation
 - D. Storage
 - E. Certified budwood vs. field selections
- VI. Incompatibility Concerns
 - A. Genetic
 - B. Virus diseases
 - C. Fungal diseases
- VII. Preparation for Grafting and Budding
 - A. Timeliness
 - B. Irrigation
 - C. Fertilization
- VIII. Post Grafting Care
 - A. Irrigation
 - B. Fertilization
 - C. New shoots training
- IX. Demonstration in the Vineyard

Assignment:

1. Compile field notes from vineyard demonstrations.
2. Reading: 10-25 pages.
3. Final exam.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Field notes.

Writing
30 - 40%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Problem solving
0 - 0%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations
0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion, Short answer.

Exams
60 - 70%

Other: Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation in class activities.

Other Category
0 - 10%

Representative Textbooks and Materials:

Grafting and Budding- A Practical Guide for Fruit and Not Plants, W.J. Lewis and D. Alexander, Landlinks Press, second ed., 2009
Instructor prepared materials.