

WINE PRODUCTION

Lesson Outline

Week 1: The concept of wine quality

Lesson 1: The many definitions of wine quality

Week 2: Wine production begins in the vineyard

Lesson 2A: Grape composition and ripening

Lesson 2B: Grape ripening from the winemaker's perspective

Week 3: Grape and wine processing

Lesson 3A: Grape handling and processing

Lesson 3B: Juice and must treatment and additions

Week 4: Overview of the winemaking process

Lesson 4A: Overview of red wine production

Lesson 4B: Overview of white wine production

Week 5: The alcoholic fermentation

Lesson 5A: Yeast biology, choice of yeast strain and nutrition

Lesson 5B: Fermentation management

Week 6: Problem fermentations

Lesson 6A: Problem fermentations

Lesson 6B: Stuck fermentations: Diagnosis and rectification

Week 7: The malolactic fermentation

Lesson 7A: Biology of the lactic acid bacteria and fermentation products

Lesson 7B: Managing the malolactic fermentation

Week 8: Post-fermentation processing and stability

Lesson 8A: Introduction to post-fermentation processing

Lesson 8B: Wine stability and fining

Week 9: Microbial stability and sanitation

Lesson 9: Microbial stability and sanitation

Week 10: Wine aging and blending

Lesson 10A: Compositional changes and wine blending

Lesson 10B: Post-fermentation operations

Week 11: Wine sensory evaluation

Lesson 11A: The flavor and aroma compounds of wine

Lesson 11B: Wine complexity and quality

Wine Production is an interactive Web course that covers the fundamentals of wine production from a technical perspective. This class is based upon the VEN124 course offered at the University of California, Davis, the first core course taken by upper division students and a prerequisite for all other courses in the Viticulture and Enology program.

The lectures are divided into eleven weekly sections, with assignments due at approximately two-week intervals (five assignments). Most assignments are based on a “case study” format and will be available for you to download from the website. Please be aware that the pace of this class is demanding and that once you fall behind, it is very difficult to catch up. This class will be challenging but can be both fun and rewarding if one actively participates through the online forums and remains current with the reading assignments.

Lessons will be accessed via the class website. Each lesson has a voice-over-PowerPoint lecture, a written set of notes and a reading assignment from the textbook (*Principles and Practices of Winemaking* by R. Boulton et al.), as well as papers from the primary research literature. These papers will be provided to you in PDF format or can be accessed through the *American Journal of Enology and Viticulture* (AJEV) website at <http://ajevonline.org/> (you will be given a temporary password that will grant you access to any and all articles that have been published in the AJEV). There is a large amount of reading in this course, so you are advised to set aside time each day to keep up.

The course grade will be based on five written assignments and your participation in the discussion forums. Each assignment will be worth 50 points (250 points total or roughly 90% of your final grade) and participation will be worth 30 points total (roughly 10% of your final grade).