WINE PRODUCTION 1: FERMENTATION
Texas Tech University
Department of Plant and Soil Sciences

Instructor: Maureen Qualia
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       Fredericksburg, TX 78624
Office Hours: By appointment
Phone: 806.834.4780
Email: maureen.qualia@ttu.edu
Emails will be returned within 24hrs Mon-Fri and 48hrs Sat and Sun.
Live Online Meeting Times: TBA
Class Location: On-line asynchronous via Blackboard
Contact Information for Technical Support: IT Help Central 806.742.HELP
Credit: 4 Continuing Education Units

COURSE DESCRIPTION
The course will provide an overview of wine production focusing on pre-fermentation processes and fermentation management. Emphasis will be placed on improved winemaking through quality control and management. This course is designed for students and individuals either interested in or currently working in grape wine production.

COURSE REQUIREMENTS:
Technology: Internet Access: Blackboard, Adobe Acrobat Reader, and Microsoft Office
Experimental Winemaking Supplies: The cost of supplies will be around ~$100. The supplies can be purchased from a store of your choosing.

READING MATERIALS
Supplemental reading materials are posted within each unit of the course. Many of the articles are sourced from industry trade journals. In order to have access to these materials you must have an active subscription to the journals. The journals most often referenced are listed below.

Subscriptions highly recommended for additional resources:

Wine Business Monthly subscription to online trade journal and print monthly magazine ($39/yr)
http://www.winebusiness.com/wbm/
Wine Business Monthly also provides a free daily email service providing the latest news in the wine industry.
https://secure.winebusiness.com/subscriptions/dailyNews.cfm?ref=dn
Membership access to US Scientific Journal***  
*American Society of Enology and Viticulture (ASEV)* membership for on-line access to the American Journal of Enology and Viticulture (AJEV) and discounts to annual symposium and conference. See [www.asev.org](http://www.asev.org). The journal is on-line and available for searches at [http://ajevonline.org/](http://ajevonline.org/). There is a modest charge per article if you are not a member of the society.

***The journal is a great source for the most current industry research. Many of the research papers presented in the journal are often summarized in the trade journal listed above as well as in the power point presentations in the course units.

NO REQUIRED TEXT
However, background reading of lecture topics is recommended using one or more of the following texts.

**Suggested Texts/ Readings**


See Blackboard course web site for additional books and descriptions.
EXPECTED LEARNING OUTCOMES
Upon successful completion of this course students should be able to:
1. Understand the overall process of grape wine production.
2. Understand basics of wine chemistry and wine microbiology.
3. Determine appropriate time to harvest grapes depending on grape variety and wine style.
4. Determine appropriate fermentation protocol for desired wine style and grape condition.
5. Understand the impact of various fermentation treatments on the outcome of the final wine.
6. Determine processing operations by comparing available technology.
7. Design and implement standard operating procedures for wine production provided varying circumstances and available technology.
8. Access and analyze current industry research and literature.
9. Identify resources available to assist in problem solving during wine production.

COURSE STRUCTURE AND REQUIREMENTS

Online Content: This course will be administered via distance and will consist of mostly asynchronous sessions. Lectures will be pre-recorded and uploaded in Blackboard. Lectures will be available online for the duration of the course. The live synchronous sessions will be held at predetermined dates used for discussion, application, and problem based learning. Dates of live discussions will be determined once class has begun.

Fermentation Experiment: This course will have a lab component consisting of small-scale experimental fermentations that may be carried out at home. Instructions will be posted on Blackboard.

ASSESSMENT OF LEARNING OUTCOMES

THIS A CREDIT/ NO CREDIT COURSE. TO RECEIVE CREDIT THERE ARE TWO REQUIREMENTS:

1. Quizzes: An average a 70% or greater must be achieved.

2. Experimental Fermentation and Reports: The Fermentation experiment and report MUST be completed. You will receive credit for a submitted report. Some individual feedback may be given directly in Blackboard. However, if you would like to discuss your experimental results and seek further feedback you will need to make an appointment to discuss via phone.

Failure to complete these requirements will result in NO CREDIT for the course.

BLACKBOARD
All lectures will be prerecorded and posted to Blackboard and will remain on the site for the duration of the course.

SUBMITTING ASSIGNMENTS
All assignments must be submitted online via Blackboard.

CONSIDERATIONS FOR LIVE ONLINE CLASSES
While attending the live online sessions, please be aware of the appropriateness of your surroundings and attire.

STUDENTS WITH DISABILITIES
Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as possible to make necessary arrangements. Students must present appropriate verification from Student Disability Services during the instructor’s office hours. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services office in 335 West Hall or call 806-742-2405.
### TENTATIVE SCHEDULE:

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<th>Unit</th>
<th>Topic</th>
<th>Activities</th>
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<tr>
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<td>Orientation/ Introduction to Class</td>
<td>On-line tutorial</td>
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<td>Chemistry Review</td>
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<tr>
<td>1</td>
<td>Wine Quality- What is it?</td>
<td>1 on-line presentation, reading and quiz</td>
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<tr>
<td>2</td>
<td>Viticulture Overview for Winemakers</td>
<td>2 on-line presentation, reading and quiz</td>
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<tr>
<td>3</td>
<td>Maturity Assessment and Harvest Operations</td>
<td>2 on-line presentation, reading and quiz</td>
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<td>4</td>
<td>Juice and Must Additions</td>
<td>5 on-line presentations, readings and quiz, 1 assignment</td>
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<tr>
<td>5</td>
<td>Red Winemaking Overview</td>
<td>2 on-line presentations, reading and quiz</td>
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<td>6</td>
<td>Phenolics</td>
<td>2 online presentations, reading and quiz</td>
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<td>7</td>
<td>White Winemaking Overview</td>
<td>1 on-line presentation, readings and quiz</td>
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<td>Yeast</td>
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<td>Fermentation Management</td>
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<td>Malolactic Fermentation</td>
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<td>Special Topics</td>
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