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## National Center of Excellence

Grape and Wine Education for the 21<sup>st</sup> Century

### VIN 246 – Intermediate Enology-Harvest/Crush

Date: **August 30– December 10, 2021**

Semester: **Fall 2021**

Instructor: David Bower

Host: Northeast Wisconsin Tech. Col.

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Host Course No.: 83889

Office Hours: By appointment via phone or email

Course Credit: 2 Hours

Phone: (336) 386-3569

Course Delivery: Online

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#### Course Description

This course in the science and technology of winemaking is intended for the experienced intermediate winemaker, the winery employee interested in career development, or the advanced home winemaker who is seeking new challenges. This course will focus on advanced science and technology concepts of winemaking as it relates to pre-harvest, fruit harvest, and procedures involved in juice and must preparation through fermentation. Basic organic chemistry, microbiology, and some mathematics familiarity are recommended.

**Prerequisites:** VIN 146 (VIN 105 and VIN 110 recommended). It is highly recommended that students enroll concurrently in VIN 268 Wine and Must Analysis

**Next Course in Sequence:** VIN 247, VIN 268, or VIN 257 and/or VIN 259

#### Course Objectives

Through lectures, facilitated discussions, quizzes and written assignments the student will demonstrate an understanding of:

- processes and procedures for evaluating grapes, juice and must
- fermentation processes and procedures for red and white wines
- production of wine with or without malolactic fermentation,
- microorganisms associated with winemaking
- basic must and wine analysis
- dealing with problem wines (stuck fermentations and spoilage)
- stabilization and fining

**Required Textbook** (same text used for VIN 247)

Students are responsible for acquiring the textbook for this course by the first week of class.

Boulton, R. B., Singleton, V. L., Bisson, L. F., and Kunkee, R. E. (1999). *Principles and Practices of Winemaking*. Springer-Verlag Media. ISBN-13: 978-1-44-195190-8

### Reference Text (optional)

Zoecklein, B. W., Fugelsang, K. C., Gump, B. H., and Nury, F. S. (1995). *Wine Analysis and Production*. Springer Science+Business Media. ISBN-13: 978-8-12-390518-1

This text is not required for this course. However, it is an excellent reference text that should be in the library of every conscientious enology student.

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### Course Schedule and Outline of Topics

<b>Week — Dates</b>	<b>Monday Live Class Meeting</b>	<b>Weekly Lecture Topic</b>	<i>Principles and Practices of Winemaking</i> <b>Required Readings:</b>
<b>1</b> 08/30 - 09/05	08/30	Pre-harvest Decisions Week 1 Quiz	pp. 24-60
<b>2</b> 09/07 - 09/12		Wine Composition and Quality Week 2 Quiz No live class Sept. 7 – Labor Day: Optional make-up on Sunday, Sept. 6 Practicum Site Form due Practicum Checklist due	pp. 24-60
<b>3</b> 09/13 - 09/19	09/13	Wine Must Analysis and Calculations Week 3 Quiz	pp. 521-537
<b>4</b> 09/20 - 09/26	09/20	Harvest Week 4 Quiz	pp. 65-98
<b>5</b> 09/27 - 10/03	09/27	White Wine Production and Sulphur Dioxide (SO <sub>2</sub> ) Week 5 Quiz	pp. 65-98 <i>and</i> 211-217
<b>6</b> 10/04 - 10/10	10/04	Red Wine Production Week 6 Quiz	pp. 65-98 <i>and</i> 221-237
<b>7</b> 10/11 - 10/17	10/11	Fermentation History; Preparation and Organisms <b>Midterm Exam</b>	pp. 102-181
<b>8</b> 10/18 - 10/24	10/18	Fermentation Management and YANs Week 8 Quiz	pp. 102-181
<b>9</b> 10/25 - 10/31	10/25	Stuck and Sluggish Fermentations Week 9 Quiz	pp. 102-181
<b>10</b> 11/01 - 11/07	11/01	Malolactic Fermentation (MLF) Week 10 Quiz	pp. 244-273
<b>11</b> 11/08 - 11/14	11/08	Early Wine Stabilization and Fining Week 11 Quiz	pp. 279-315
<b>12</b> 11/15 - 11/19	11/15	Review of Course <b>Reflection Paper due</b> <b>Field Practicum Journal due</b> <b>Final Exam</b>	

*The instructor reserves the right to adjust the schedule as necessary.*

## **Instructional Methods**

This is an online course with a synchronous component. An online course site provided by the host institution provides announcements, lectures, notes, and supplemental printed and web-based materials to the students. It also serves as a central point for interaction/communication between instructor and students.

## **Live Class Meetings**

The live class meetings will take place every **Monday from 6:30 to 7:30 p.m. Central Time** via the **Zoom** web conferencing system. Participation to the live class meetings is required and a participation points are assigned. This is an opportunity for the instructor to discuss weekly topic highlights and for students to interact with the instructor and fellow students through questions and discussions.

Students are expected to be prepared to ask questions and actively participate in the discussions by having: 1) completed the reading assignment(s); 2) watched the lecture video; 3) made their Discussion posts; and 4) completed the weekly quiz – before attending the live class.

The link to the Zoom virtual classroom will be posted at the top of each weekly module. Students will use the same virtual classroom for their live class meetings the entire semester. The sessions will take place on the dates listed in the above schedule.

It is the student's responsibility to notify the instructor in advance if he/she must miss a class. Students who missed a class meeting are required to view the recording of the live class as soon as possible.

## **Field Practicum**

There is a required **16-hour** practicum component to this course. The purpose of the practicum is to provide students with hands-on experience in the winery by assisting in various winery operations. All students must identify a winery in their area that would be willing to serve a field practicum site and provide a mentor to guide the student during their hands-on experiences in their enology course.

After identifying their mentor, the student should complete the online **Field Practicum Site Form** (link available on the course site and the VESTA website) by the end of the **second** week of the semester. Upon receipt of the form, the VESTA office will send a packet of information to the mentor explaining the field practicum, the skill sets to be completed by the student, and the mentor's role in the field experience. The packet also includes a **Student Assessment Form (SAF)** for the mentor to fill out and send to the VESTA office at the conclusion of the practicum.

## **Course Assignments**

There will be weekly lecture and reading assignments, two exams, and a capstone project, and participation in field practicum. Students are also required to keep an online reflective journal for the field practicum experience.

**Weekly Reading Assignments:** Students should view the prerecorded weekly lecture video and complete the textbook reading assignments (in *Principles and Practices of Winemaking*) before the live class meeting. The book is supplemental to the lecture material, since it goes into more technical detail than will be required in this course.

**Discussion Forums:** Besides the Introduction Forum where you introduce yourself to the class, there are 10 graded (25 points each) discussion questions; one each for Week 1 – Week 10. You must post your answer *prior* to the live class meeting. You must also respond to at least one of your classmate’s posts every week.

**Study Guides:** Study guides will be posted for each lecture topic as a guide for taking the exams and what level of material will be required for the course.

**Quizzes:** There will be 10 weekly short answer quizzes (Weeks 1-6 and 8-11). These quizzes will contain questions that check your understanding of the concepts learned each week. The quiz files can be downloaded from the online course site and are due on Sunday before the live class session.

**Exams:** There will be two exams, a Midterm and a Final exam. The Midterm Exam will cover materials from Weeks 1 to 6. The Final Exam will be comprehensive for the semester, with an emphasis on Weeks 7 - 11.

Students will download the exam file from the course site, complete the exam, and submit the completed files through the online course site to the instructor by the deadline posted on the site.

**Practicum Journal:** Students will be required to keep an online practicum journal for the 16-hour practicum activities during the semester. It will be entered on the online course site using the journal tool provided. Instructions are posted on the online course site as well. Your instructor will view the online journal entries from time to time and make comments if necessary.

**Final Reflection Paper:** Each student must complete a reflection paper of their overall practicum experience. Detailed instructions are located in the Week 10 folder on the course site.

### **Important Note about Late Assignments**

**Late assignments will not be accepted.** Students should make arrangements to submit an assignment early. The instructor will only accept late assignments in extreme situations with advanced notice and a 5% point deduction for each week the assignment is late.

### **Expectations and Instructor Feedback**

With the online course format, students are expected to participate and be prepared to interact in the live class meetings. Students also need to check the online course site for class materials and communications regularly, be aware of the required activities and assignments, and adhere to the deadlines listed in the course schedule. This will ensure a successful learning experience. The instructor will make the best effort to respond to student questions and complete assignment/exam grading on a timely manner.

### **Make-up Policy**

The exams can be made up only in the event of an excused absence where the instructor has prior knowledge of the absence. Allowance of make-up tests will be at the discretion of the instructor.

## Grading

Student grades will be determined based on their total points earned in this class. The table below outlines the total points possible for this class and their percentage weight.

Percentage Weight of Student Performance		
Activity	Points Possible	Percentage
10 Weekly Quizzes (30 points each)	300	30.0%
Submit Practicum Planning Checklist	10	1.0%
Student Assessment Form (submitted by mentor)	25	2.5%
Practicum Journal	65	6.5%
Midterm Exam	100	10.0%
Final Exam (comprehensive)	150	15.0%
10 Discussion Forum contributions (25 points each)	250	25.0%
Final Written Assignment	100	10.0%
<b>Total</b>	<b>1,000</b>	<b>100%</b>

Grade calculation: total points earned ÷ total points possible; then using the following scale to determine final letter grades:

90 – 100% = A	80 – 89.9% = B	70 – 79.9% = C	60 – 69.9% = D	Below 60% = F
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INSTITUTIONAL POLICIES ON FOLLOWING PAGE

# Northeast Wisconsin Technical College Institutional Policies

## Student Responsibilities and Policies

As a student of NWTC, you are expected to adhere to the policies of the College, as outlined in the *Student Handbook* which can be viewed and or downloaded at:

<https://www.nwtc.edu/NWTC/media/student-experience/student%20involvement/FY16-17-Student-Handbook-FINAL-without-ad-pages.pdf>

Please be fully aware of the following policies: Academic Integrity (includes plagiarism, cheating and collusion); Assessment; Copyright Notice; Refund Policy; Student Code of Conduct; Withdrawal from a Class or Program.

## Withdrawals and Refunds

Should it become necessary to withdraw, it is the student's responsibility to do so according to the guidelines in the Northeast Wisconsin Technical College policies. Please see the link below for information related to withdrawals and refunds.

<http://www.nwtc.edu/services/studentfinancialservices/Pages/RefundPolicy.aspx>

*\*Students planning to withdraw from this course must also complete the VESTA Withdrawal/Change of Schedule form and submitting to the VESTA office.*

## Student Email

NWTC offers a student e-mail account for all students. All official email sent from the host institution or sent through Blackboard, will go to this account. Therefore, you are responsible for setting up and monitoring your NWTC student email account. This is not optional; it is a requirement of the course. Student email can be accessed by visiting <https://www.nwtc.edu/students/new-students> Student technical assistance is available 24 hours a day, 7 days a week; call toll free at 1-866-235-5037.

If you do not intend to use your NWTC email account, you must contact NWTC Tech Support to redirect (forward) your NWTC email to the email account of your choice. Your instructor will not accept "I didn't get the email" as a legitimate excuse for missing assignments or tests, schedule changes, or other important messages from your instructor, or the host institution.

## Disability Act Statement

NWTC complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. For more information contact Student Accommodations Services at: <https://www.nwtc.edu/student-experience/accommodation-services>

## Student Rights

For additional information regarding your rights as a student, including college policies on harassment, student rights and other services available at NWTC, please consult the NWTC

Student Handbook, available through Student Services or on the NWTC webpage at <http://www.nwtc.edu>

### **Student Code of Conduct**

Students are expected to conduct themselves in accordance with the Student Code of Conduct listed in the *Student Handbook* (see link above). As noted in the handbook, violations will be brought to the immediate attention of the Student Conduct Team and may be referred to the Dean of Student Development or to the Supervisor of Student Involvement. Additionally, in cases where behavior(s) warrants concern over the safety of the student(s), an alert may be made to the Responsive Intervention for Student Concerns (RISC) Committee.

### **Course Cancellation**

Unanticipated course cancellation by NWTC will be posted as early as possible in the “Announcements” section of the Blackboard course site. Students will also be notified by email.