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Grape and Wine Education for the 21st Century

VIN 293 – Soils for Viticulture

Date: **January 25 – May 07, 2021**

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Virtual Office Hours: By appointment, email, phone

Semester: **Spring 2021**

Host: Northeast Wisconsin Tech. Col.

Host Course No.: 83891

Course Credit: 3 Hours

Delivery Format: Online

Course Description

The course will explore soil properties and behavior and their influence on vine growth and wine grape characteristics. The course focuses not only on growth and production, but on the long-term effects of viticulture on soil quality and the wider environment. The goal of the course is for students to be able to select sites for a new vineyard, and help manage soils in existing vineyards upon completion of the course.

Prerequisites: None

Next Course in Sequence: VIN 213

Course Goals

The course is designed to provide experiences that will enable the student who successfully completes this course to gain an understanding of:

- Soils and the environment
- The makeup of soil
- The vine root habitat
- The concepts of soil fertility and chemistry
- How the soil supplies nutrients
- The primary nutrients
- Secondary and micronutrients
- Nutrients for healthy vines and good wines
- Soil testing and interpretation
- Plant nutrients and the environment
- Soil-water-vine relationships and water management
- Soil quality in vineyards
- Site selection and soil preparation
- Soil and wine regions

Required Textbooks

Brady, N. C., & Weil, R. R. (2009). *Elements of the Nature and Properties of Soils*. (3rd ed.). Pearson-Prentice Hall. ISBN-13: 978-01-3501-433-2

White, R. E. (2009). *Understanding Vineyard Soils*. Oxford University Press. ISBN 13: 978-01-9531-125-9

Course Schedule and Outline of Topics

Week — Date	Monday Live Class Meeting	Lecture Topics	Readings, Assignments, and Exams
1 01/25 - 01/31	01/25	Welcome, Course Overview and Syllabus; Soils and Viticulture	Ch. 1
2 02/01 - 02/07	02/01	Soil Formation	Ch. 2
3 02/08 - 02/14	02/08	Soil Physical Properties	Ch. 4, 7
4 02/16 - 02/21	—	<i>No live class 02/26, President's Day</i> Soil-water Relations / Vine Water Status	Ch. 5, 6
5 02/22 - 02/28	02/22	Review and Exam I	EXAM I
6 03/01 - 03/07	03/01	Soil Chemical Properties: Soil Colloids	Ch. 8
7 03/08 - 03/14	03/08	Soil Chemical Properties: Soil pH and Salinity	Ch. 9
8 03/15 - 03/21	03/15	Review and Exam II	EXAM II
9 03/22 - 03/28	03/22	Soil Nutrition: The Macronutrients Soil Report – A due	Ch. 12 Soil Report - A due
10 03/29 - 04/04	03/29	Soil Nutrition: The Micronutrients	
11 04/05 - 04/11	04/05	Practical Vineyard Nutrient Management	Ch. 13*
12 04/12 - 04/18	04/12	Review and Exam III	EXAM III
13 04/19 - 04/25	04/19	Site Selection and Soil Preparation	
14 04/26 - 05/02	04/26	Soil Report – B due Review for Final Exam	Soil Report - B due
15 05/03 - 05/07	05/03	Course Wrap-up, Review Soil Report Presentation Final Exam	Final Exam

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

*Reading assignments marked with an asterisk indicate additional online reading as noted on your course site.

Instructional Format

This is an online course with a synchronous component. An online course site (Learning Management System) is utilized to provide announcements, lectures, notes, supplemental printed and web-based materials, and assignments to the students. It also serves as a central point for interaction/communication between the instructor and the students.

Live Class Meeting

The live class meetings will take place every **Monday from 7:30 to 8:30 p.m. Central Time** via the **Zoom** web conferencing system. Participation to the live class meetings is required and a participation grade is assigned. This is an opportunity for the instructor to go over 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.

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. The recording of each live class will be available within 24-48 hours after each session for those who miss a live class.

Course Assignments

Course assignments include weekly readings (online lectures/presentations and print-based materials), posting and responding to other students' weekly discussion questions, a soil report, and three exams.

Weekly Reading Assignments: Online lectures/presentations and web/print-based materials will be posted on the online course site. Students should view the prerecorded weekly lecture video and complete the weekly discussion board postings/assignments **before** each live class meeting.

Weekly Discussion Questions: Students will be asked to post weekly questions based on lectures and readings on the online course site "Discussion Board" by noon Central Time on the day of the live class meeting. **After the live class meeting**, students are responsible for posting responses to at least one other student's questions by noon Central Time of the following week's live class meeting. Late postings will not be accepted, no points will be given for questions/answers posted after the due date and time.

Soil Reports: Utilizing the Soil Report guidelines (Guideline A and Guideline B) provided in the course site assignments, students will complete **two** Soil Reports for this course. Late reports *will not* be accepted, and no points will be given for reports posted after the due dates.

Exams: There will be three Exams and a comprehensive Final Exam. Exam I will cover topics studied in weeks 1-3; Exam II will cover topics studied in weeks 4-6; and Exam III will cover topics studied in weeks 7-9. The Final Exam will be comprehensive with 50% focusing on weeks 1-9 and 50% on weeks 10-14. Students will take the exams online through the course site. All exams are open book and notes.

Expectations and Instructor Feedback

Students should participate in the weekly virtual class meetings. It is also the students' responsibility to check the online course site on a regular basis, be aware of the required activities and assignments, and adhere to the deadlines. This will ensure a successful learning experience.

The instructor will make every effort to respond to student questions and complete assignment/exam grading on a timely manner.

Late Assignments

Late postings will not be accepted, no points will be given for questions/answers posted after the due date and time. Students should work ahead instead of making up. In order for the instructor to submit the final grades by university deadline, *there can be absolutely no extensions for Final Exam*, so be mindful of Final Exam deadline.

Grading

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

Percentage Weight of Student Performance		
Activity	Percentage	Points
Weekly Discussion Questions	13	100*
Live Class Participation	14	110†
Soil Report - A	10	80
Soil Report - B	10	80
Exam I	13	100
Exam II	13	100
Exam III	13	100
Final Exam	13	100
Total	100%	770
* 10 Discussion Board Entries (weeks 1-4, 6-7, 9-11; 14) 10 points each.		
† 11 weekly live class sessions (weeks 1-4; 6-7; 9-11; 13-14) 10 points each.		

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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It is the students' responsibility to see that all graded assignments and exams reach the instructor in a timely fashion so grades can be issued.

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 Northeast Wisconsin Technical College policy. For information related to withdrawals and refunds click on this link:

<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 submit it 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 monitoring your NWTC student email account. 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 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, 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.

Class Cancellation

Class cancellations 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.