



2020

## Sustainable Grape Production

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**STOCKSCH 390G:**  
**Sustainable Grape**  
**Production**  
**3 credits**  
**Instructor: Elsa Petit,**  
[epetit@umass.edu](mailto:epetit@umass.edu),  
 @ElsaPetit13



*A fully remote course to prepare you to winter cultural practices in the vineyard.*

<b>Contact</b> 	<b>Meet with Me</b> 	<b>Class Location, Day, and Time</b> 	<b>Course Materials</b> 
<b>Instructor:</b> Dr. Elsa Petit Stockbridge School of Agriculture <a href="mailto:epetit@umass.edu">epetit@umass.edu</a> Pronouns: She/Her	Zoom office hours by appointment	This course is remote but attendance is mandatory via Zoom.  <b>Lectures:</b> M 1:25-2:15PM F 1:25-2:15PM  <b>Lab:</b> F 2:30-5:15PM  Lab is <b>not</b> scheduled for the first week of classes.	<b>Moodle:</b> All the course content will be on Moodle. Please check Moodle often.  <b>Text provided through            Perusall:</b>  <b>Suggested Text (non            mandatory)</b>  Coombe and Dry. 1995. Viticulture. Volume II. Practices.

## What is in this Syllabus? (Table of Contents)

<b>WHAT IS IN THIS SYLLABUS? (TABLE OF CONTENTS)</b>	<b>2</b>
<b>OVERVIEW OF THE COURSE</b>	<b>3</b>
<b>MY HOPES AND VISION FOR THE COURSE</b>	<b>3</b>
<b>LET US INTRODUCE OURSELVES TO YOU</b>	<b>3</b>
<b>WHAT WILL YOU LEARN ALONG THE WAY? IN OTHER WORDS, THE LEARNING OBJECTIVES</b>	<b>4</b>
<b>WHAT WILL HELP YOU BE SUCCESSFUL IN THIS COURSE?</b>	<b>4</b>
<i>Disability Accommodation and Inclusive Learning Statement</i>	<b>4</b>
<i>Office Hours</i>	<b>5</b>
<i>Name and Pronouns</i>	<b>5</b>
<i>Academic Honesty</i>	<b>5</b>
<i>Attendance</i>	<b>5</b>
<i>Participation</i>	<b>6</b>
<i>Class Readiness</i>	<b>6</b>
<i>Title 9</i>	<b>6</b>
<b>WHAT ARE YOU EXPECTED TO DO THROUGHOUT THE SEMESTER? ASSIGNMENTS</b>	<b>7</b>
<i>Attendance - 5%</i>	<b>7</b>
<i>Participation - 5%</i>	<b>7</b>
<i>Weekly Readings On Perusall (Accessed Through Moodle) - 20%</i>	<b>7</b>
<i>Weekly Quizzes On Perusall Readings and Lecture Videos - 30%</i>	<b>7</b>
<i>Weekly Active Learning Lab Activities - 15%</i>	<b>7</b>
<i>Final individual project - 25%</i>	<b>7</b>
<b>HOW WILL YOU BE GRADED?</b>	<b>8</b>
<i>Assignment Grade Distribution</i>	<b>8</b>
<i>Grading Scale</i>	<b>8</b>
<i>Deadlines, Late Work and Missed Work</i>	<b>8</b>
<b>COURSE SCHEDULE</b>	<b>9</b>

### Overview of the Course

*I am excited for you to join me and your colleague students (Sustainable Food and Farming, Sustainable Horticulture, Mathematics, Food Science, Biology, Individual concentration) on this course in Sustainable Grape Production. The course is fully remote with synchronous meetings offered through Zoom. The industry of cool climate viticulture is growing thanks to newly bred varieties adapted to our local conditions. A number of small, family-run vineyards have been opening in New England. You will learn the principles and practices governing the establishment and management of an organic or sustainable vineyard. You will learn practices such as pruning, grafting, and vineyard establishment. A specific emphasis will be given to the challenges and opportunities of the growing local cold climate industry.*

### My Hopes and Vision for the Course

*I envision this course as a supportive and inclusive learning community where we can learn about grape production using active learning activities in your surroundings and discuss our thoughts and ideas. The lectures will help understand the principle of viticulture. We will make connections to the professional world whenever possible. There will be weekly readings, quizzes, experiential activities and an end of the semester project.*

### Let me Introduce Myself To You



**Instructor Elsa Petit:** *My teaching is specifically focused on grape production, plant pathology and sustainability in agriculture. In my research, I focus on the dynamics of infectious diseases in agro- and wild-ecosystems and how this understanding helps us make both systems more resilient to diseases. I also work with growers directly (research and education) in what we refer to as Extension. I am originally from the wine country in France where I studied in Bordeaux. I then pursued a PhD in Plant Pathology and Viticulture in California. Being someone that learns by doing in a safe non-threatening environment, I am a big supporter of peer learning (learning with your peers, your student colleagues) and experiential learning or hands-on.*

### **What Will You Learn Along The Way? In Other Words, The Learning Objectives**

*Perusall readings, lectures videos and their quizzes, discussions with peers, instructors and guest lecturers, active-learning assignments and the final individual projects are designed to help you:*

- 1. Understand how history shaped viticultural practices*
- 2. Understand the concept of rootstock and grapevine varieties and breeding programs.*
- 3. Understand plant propagation principles used in nurseries and put those principles into practice with grafting and rooting grapes.*
- 4. Learn the procedures used to train and prune grapevines in a variety of trellis and training systems and practice them.*
- 5. Understand the anatomy of the grapevine dormant buds and use that knowledge to predict crop levels and cold injury.*
- 6. Learn from grape growers about the challenges and opportunities of the local cold climate grape industry.*
- 7. Practice what you have learned with the final individual project.*

### **What Will Help You Be Successful In This Course?**

#### **Disability Accommodation and Inclusive Learning Statement**

*It is important for me that each of you can succeed in this course. The University of Massachusetts Amherst is committed to providing the most accommodations to meet the needs of students with disabilities. If you have a disability and need accommodations, please register with Disability Services ([www.umass.edu/disability](http://www.umass.edu/disability); phone 413-545-0892) so they send me an accommodation letter within the first two weeks of the class so I can accommodate you on time.*

*Each of us learn differently and bring different strengths to the learning environment of the class. Please let me know if there are aspects of the course that makes you feel excluded, we can develop strategies for your success in the class. Also, do not hesitate to take advantage of the resources of campus:*

Learning Resource Center - <http://www.umass.edu/lrc>

Student Success - <https://www.umass.edu/studentsuccess/>

Center for Counseling and Psychological Health (CCPH) -  
<http://www.umass.edu/counseling>

English as a Second Language (ESL) Program - <http://www.umass.edu/esl>

# **STOCKSCH 390G: Sustainable Grape Production**

## **Office Hours**

*Office hours are an important part in supporting you throughout this course. The interesting part of teaching is to get to know you better as individuals, please do not hesitate to contact me to talk more. My office hours are by appointment: please email me at [epetit@umass.edu](mailto:epetit@umass.edu) and we will find a day and/or time to meet online through Zoom.*

## **Name and Pronouns**

*You have the right to be addressed to by the name and pronouns that you use for yourself. Sometimes your preferred names/pronouns are indicated on SPIRE on the roosters. I would like to make sure I address you how you would like me to so please do let me know how if it is not indicated in SPIRE.*

*To learn more, read: [Intro Handout on Pronouns](#) ([https://www.umass.edu/stonewall/sites/default/files/pronouns\\_intro.pdf](https://www.umass.edu/stonewall/sites/default/files/pronouns_intro.pdf))*

## **Academic Honesty**

*Please make sure you are aware of the Academic Honesty Policy (<http://www.umass.edu/honesty/>) at The University of Massachusetts Amherst.*

*How do I know if this is plagiarism? In general terms, plagiarism is trying to get credit for work completed by someone else. Yet, our own knowledge and comprehension of a subject is informed and shaped by the work of others. I encourage you to work and learn from other students or other professors to clarify your understanding and that would not be considered plagiarism. But if you use the work/words of others without adding to or modifying their work, that would be considered plagiarism.*

*If you have any questions about what may constitute plagiarism, please consult with me and/or consult [Academic Dishonesty Guide for Students](#) (<https://www.umass.edu/honesty/>).*

## **Attendance**

*This class is based on learning through peer reviews, discussions and sharing active learning experience. It means you will learn only if you attend, are on time, and engaged with the topic in every session.*

*Attendance will be taken. You will receive full credit for attendance if you attend each session. Should you need to miss a class, please let me know in advance via [epetit@umass.edu](mailto:epetit@umass.edu) and provide me with an official documentation to avoid an automatic zero for that session.*

## **STOCKSCH 390G: Sustainable Grape Production**

*Absences for illness, family emergencies, religious observance, or absence for special events of student athletes, members of the UMass marching band or some other groups would be excused with the official documentation with names and dates. See <https://www.umass.edu/gateway/religious-observance> for the University attendance policies for religious observances.*

### **Participation**

*We will grade participation to small assignments that help us know each other like pre-class surveys, posting videos of yourself to introduce yourself, ... Even though your participation during class time is not graded, your retention of the material will be increased by an active engagement in the class. This means writing notes in a notebook dedicated to the class, being alert, asking questions when you find something curious or need to clarify your understanding, bringing show-and-tell or interesting news about grape production. Do not forget to have fun!*

### **Class Readiness**

*This course has a flip design where the lecture content is moved from face to face time to before class and assigned as homework. This will allow for more interaction during class using peer reviews, discussions as a class, show and tell sessions, interaction with guest speakers. Most weeks, you will have to comment on a reading on Perusall, watch short videos, complete quizzes and small active learning assignments will need to be completed before some of the lab class period. This will allow you to get ready for the next topic and learn from each other's questions and me to see what level of understanding you have.*

### **Title 9**

*If you have been the victim of sexual violence, gender discrimination, or sexual harassment, the University can provide you with a variety of [support resources](http://www.umass.edu/titleix/title-ix-campus-resources) (<http://www.umass.edu/titleix/title-ix-campus-resources>) and accommodations.*

# **STOCKSCH 390G: Sustainable Grape Production**

## **What Are You Expected To Do Throughout The Semester? Assignments**

### **Attendance - 5%**

*Each week, you get points for attending. Easy points to get but also easy to lose.*

### **Participation - 5%**

*A few times during the semester you will be asked to post personal videos or fill in surveys that will help us get to know each other better.*

### **Weekly Readings On Perusall (Accessed Through Moodle) - 20%**

*Each week you will be assigned a text to read on Perusall (access through Moodle) and to get credit, you will need to ask two pertinent questions or answer or comments on someone else's question. The purpose of these assignments is to prepare you for the lecture and for me to see what points need to be clarified. The work is individual and you will get full grade if your questions/comments/answers are pertinent, 50% if they are good but not thorough and zero if you do not post anything or make an "empty" questions/comments/answers, for example if you answered "yes, that is right" to someone else post, it will not count.*

### **Weekly Quizzes On Perusall Readings and Lecture Videos - 30%**

*Each week, you will have a video for each of the lectures and short quizzes to complete. You will take the quiz two times, once before class time and once after you talk to your peers during class. The first quiz will be due the day before the lecture and the second quiz will be due a week after.*

### **Weekly Active Learning Lab Activities - 15%**

*Each week, you get to apply what you learn and complete a short experiential assignment done remotely.*

### **Final Individual Project - 25%**

*To make this more concrete and cement your learning in this course, each student carries a final individual project. Each project is based on real case scenario either research-based or management-based. You will work to either analyze data from research going on now, think about a new research proposal to solve an important question or on a question about the management of the organic student-run vineyard. The last day of class, each student will present their work.*



# STOCKSCH 390G: Sustainable Grape Production

## How Will You Be Graded?

### Assignment Grade Distribution

The course grade will be calculated from the following activities (total of **100 points**):

Attendance:	5 points
Participation:	5 points
Weekly Perusall Readings:	20 points
Weekly Quizzes On Perusall Readings and Lecture Videos:	30 points
Active Learning Assignments:	15 points
Final Individual Project:	25 points

### Grading Scale

A	=	95-100	B-	=	80-82	D+	=	67-69
A-	=	90-94	C+	=	77-79	D	=	60-66
B+	=	87-89	C	=	73-76			
B	=	83-86	C-	=	70-72			

### Deadlines, Late Work and Missed Work

*I have scheduled the due dates for assignments to align course content with in-class activities and your learning.*

*Assignments are due by the date displayed on the syllabus and on Moodle (checklist and calendar). I will accept assignments for partial credits following the due date [losing 25% points per day late].*

*If you know in advance that you cannot complete a required assignment you must email me your official documentation at least 2 weeks prior so we can make other arrangements. If you unexpectedly require an extension, you must contact me at least 24 hours in advance of when the assignment is due with official documentation.*

*If you don't turn in an assignment at all, you will receive 0.*

# STOCKSCH 390G: Sustainable Grape Production

## Course Schedule

Calendar of lectures and labs topics and due dates (subject to changes):

The last five columns are describing the assignments to get ready for lecture and are due the day before we meet.

Week	Day	Date	Topics	Topic lab	Assignments to get ready for class		
					Perusall reading	Video of lecture and related quiz (take 2 times before and after talking to your peers in class)	Active learning related to the lab
1	M	2/1/21	Non-graded quiz and syllabus				
1	F	2/5/21	Presentation of the choice for the individual projects	No lab for the first week			
2	M	2/8/21	Domestication of grapes - Guest speaker Dr. Tristram Seidler, curator of the Umass herbarium		x	x	
2	F	2/12/21	Classification of grapes - Main species	Native species presentations	x	x	Native species presentations and inaturalist post on a species found in your surrounding
3	M	2/15/21	Breeding grapes - Guest		x	x	

## STOCKSCH 390G: Sustainable Grape Production

Week	Day	Date	Topics	Topic lab	Assignments to get ready for class		
					Perusall reading	Video of lecture and related quiz (take 2 times before and after talking to your peers in class)	Active learning related to the lab
			speaker Pr. Bruce Reisch, breeder at Cornell Agri Tech				
3	F	2/19/21	Usage of grape varieties	Evaluating grapes, raisins, aromas.	x	x	Gather (if possible) table grapes, raisins and spices for aromas
4	M	2/22/21	Nursery - Guest speaker Andy Farmer, owner of Northeastern Vine Supply, Inc.		x	x	
4	F	2/26/21	Principle on plant propagation	Grafting	x	x	Collect grafting tools
5	M	3/1/21	No class - Wednesday schedule				
5	F	3/5/21	Cold injury - Guest speaker Dr. Ian Modestow, Owner of Black Birch vineyard	Bud dissection for cold injury	x	x	Place grape cuttings outside and collect them 2 days before lab starts.
6	M	3/8/21	Pruning principles 1/2		x	x	

# STOCKSCH 390G: Sustainable Grape Production

Week	Day	Date	Topics	Topic lab	Assignments to get ready for class		
					Perusall reading	Video of lecture and related quiz (take 2 times before and after talking to your peers in class)	Active learning related to the lab
6	F	3/12/21	Pruning principles 2/2	Pruning workshop	x	x	Optional and depends on your access to grapes around you.
7	M	3/15/21	Training systems - Guest speakers owners of Glendale vineyard and Mineral Hills		x	x	
7	F	3/19/21	Canopy management  Guest speaker from IPO, Ashley Krause, presenting the Adelaide exchange program	Canopy management workshop	x	x	The workshop will be virtual and does not require you to prepare anything in advance.
8	M	3/22/21	Presentation of individual projects				