Syllabus FST 252. Wine Making Laboratory – 1 Credits Term, Year Meeting Day(s), Time, Place

Instructor:Name and TitleOffice:Location and office hours (if applicable)Phone:Include personal number only if you are willing to release to studentsE-mail:@tillamookbay.cc or @mail.tillamookbay.cc or other

Course Description: Produce grape wines according to vinification protocols. Includes grape handling and vinification practices as well as chemical and sensorial grape must and wine analysis. Prerequisite(s): 21 years of age or older.

Addendum to Course Description

No book is required to be required but some books may be suggested as good supplemental reading for the course depending on student interests.

The purpose of this class is to give a broad overview of the various methods used in the production of wine. Labs will cover the history, viticulture, chemistry, and technology of table wine making as well as sparkling and dessert wines. Subjects will be first introduced then further developed in labs.

TBCC Email: TBCC will use electronic communication methods to conduct official and legal College business. Students are responsible to check their TBCC email and the TBCC student portal (MyTBCC) for information from the College.

Course Learning Outcomes:

- 1. Apply various methods used in the production of wine.
- 2. Describe history, viticulture, chemistry, and technology of wine making.
- 3. Produce grape wines according to vinification protocols.
- 4. Apply grape handling and vinification practices.

Program Learning Outcomes:

- Perform critical reasoning, perceive assumptions, and make judgments based on the basic principles of agriculture, natural resources, and related fields.
- Exhibit critical thinking skills when addressing issues in agriculture, natural resources, and related fields.

Institutional Learning Outcomes:

ILO #13. Demonstrate the knowledge, skills, and professional attitude necessary to enter and succeed in a defined profession or advanced academic program.

ILO #8. Analyze and evaluate information to address issues and solve problems.

ILO #9. Develop creative responses to ideas and information.

Competencies and Skills:

- History of Winemaking
- Viticulture and Grape Varieties
- Basic Chemistry Review and Primary Fermentation
- Harvest Sampling, Basic Juice Analysis

- White Wine Harvesting and Crush
- White Wine Harvest, Pressing, Juice Treatment
- Red Wine Harvesting, Crush, and Malolactic Fermentation
- Red Wine Harvest and Crushing
- Wine Chemistry
- Wine Additives & Sulfur Dioxide
- Tasting Analytically & Sensory Evaluation
- Wine Processing & Cellar Procedures
- Barrels and Aging
- Finning Agents & Winery Sanitation
- Post Fermentation Wine Treatment & Fining
- Wine Blending & Bottling
- Wine Defects & Winery Sanitation
- Sparkling & Dessert Wines
- Wine Law & Alcohol and Health

Instructional Materials:

No book is required to be required but readings will be assigned in class and other readings suggested as supplemental for the course.

Course Requirements:

Lab Assignments: Lab assignments will worth 10 points each and will be part of every class except in the first week.

<u>Quizzes:</u> Quizzes will be worth 10 points each. There will be 10 quizzes over the course of the term that will occur at the start of class and cover content identified in the previous week.

<u>Business Plan Presentation</u>: A Business Plan Presentation will be worth xx points. Students will develop a business plan for their own winery and present their plan to classes in Weeks 9 and 10.

Oregon Wine Law Summary Paper: A 1-page summary paper will be due in Week 11 on the topic.

Grading:

Lab Assignments = 10 points each = 100 points	35% of course grade
Quizzes = 10 points each = 100 points	35% of course grade
Business Plan Presentation = 100 points	20% of course grade
Oregon Wine Law Summary Paper = 100 points	10% of course grade

 $A = 90\text{-}100\% \qquad B = 80\text{-}89\% \qquad C = 70\text{-}79\% \qquad D = 60\text{-}69\% \qquad F = 0\text{-}59\%$

ADA Statement:

Students who have a documented disability and require a classroom adjustment or accommodation should contact the Disabilities Coordinator/Career Education Advisor and provide the Approved Academic Accommodation form to the Instructor.

Academic Support Statement:

The Learning Center provides assistance to students with writing and math assignments. Hours are posted in the Library and classrooms. Peer tutors are available to assist students in a variety of subjects. Contact the Library for more information on peer tutoring.

Class Registration Statement:

Students may attend this course only if registered. Students who are unable to attend must drop the course through Student Services. To have tuition charges removed, the course must be dropped by the student before the drop with refund deadline in the Class Schedule. Students who never attend, or stop attending, without dropping may receive a NS, W, or F and will be required to pay for the course.

Grading Options Statement:

Students taking credit classes can choose between receiving traditional letter grades (A-F) and Pass/No Pass (P/NP) if the department has permitted both options for a course. *If you do not select a grading option*, you will automatically have the default grading option for that course. The default option is generally a letter grade, but could be pass/no pass. You can change your grading option through Student Services up until the eighth week of the term (for an eleven-week course). The only grading option available for each student is the one the student submitted during the selection timeframe. With the instructor's written permission, some courses may allow students to attend a course without receiving a grade or credit for the course. In order to Audit a class, you must return a signed form to Student Services. Your request must be processed by Student Services by the drop deadline for the course. You cannot opt into or out of (i.e. change your grading option from audit to a letter grade) after the drop deadline. Auditing a course does not satisfy requirements for entry into courses where prerequisites are specified.

Academic Integrity/Student Conduct Statement:

Students of Tillamook Bay Community College are expected to behave as responsible members of the College community while on campus and to be honest, ethical, and professional in their behavior and academic work. Tillamook Bay Community College strives to provide students with the knowledge, skills, judgment, and wisdom they need to function in society and careers as educated adults. Respect for others and behavior appropriate for a professional and educational environment is required of all. Behavior that violates the Code of Student Conduct, including any behavior disruptive to the educational process, is subject to disciplinary action. To falsify or fabricate the results of one's research; to present the words, ideas, data, or work of another as one's own; or to cheat on an examination is dishonest and corrupts the essential process of higher education. Academic dishonesty is also subject to disciplinary action. The full text of TBCC's Code of Student Conduct and Academic Integrity Policy can be found in the Student Rights and Responsibilities section of the TBCC Catalog.

Tentative Schedule by Week/Day and Date:

Week 1.	Introduction & History of Winemaking; Viticulture and Grape Varieties
Week 2.	Basic Chemistry Review and Primary Fermentation Harvest Sampling, Basic Juice Analysis Quiz #1; Lab Assignment 1
Week 3.	White Wine Harvesting and Crush White Wine Harvest, Pressing, Juice Treatment Quiz #2; Lab Assignment 2
Week 4.	Red Wine Harvesting, Crush, and Malolactic Fermentation Quiz #3; Lab Assignment 3

Week 5.	Wine Chemistry; Wine Additives & Sulfur Dioxide Quiz #4; Lab Assignment 4
Week 6.	Tasting Analytically & Sensory Evaluation; Wine Processing & Cellar Procedures Quiz #5; Lab Assignment 5
Week 7.	Barrels and Aging; Fining Agents & Winery Sanitation Quiz #6; Lab Assignment 6
Week 8.	Post Fermentation Wine Treatment & Fining Wine Blending & Bottling Quiz #7; Lab Assignment 7
Week 9.	Wine Defects & Winery Sanitation Quiz #8; Lab Assignment 8 Student Business Plan Presentations
Week 10.	Sparkling & Dessert Wines Quiz #9; Lab Assignment 9 Student Business Plan Presentations
Week 11.	Wine Law & Alcohol and Health Quiz #10; Lab Assignment 10

Technology Statement:

Most students need the following in order to take courses at TBCC. You are still encouraged to take this class, but if you lack technical or skill knowledge, please see me after class or make an appointment so that we can talk.

Technical (need):

- 1. Access to a computer (at home, school, or work) which you can use for extended periods of time.
- 2. Broadband internet access (cable modem, DSL, or other high speed).
- 3. Firefox 3.0 or later or Internet Explorer 7 or later. Safari and Chrome also work.
- 4. Permission/ability to install plug-ins or class software (e.g. Adobe Reader or Flash).
- 5. Highly recommended: up-to-date anti-virus software. If you are using your own computer check out the free anti-virus program at <u>www.Avast.com</u>.

Skills (ability):

- 1. Navigate web sites, including downloading and reading files from web sites.
- 2. Download and install software or plug-ins such as Adobe Reader or Flash.
- 3. Use email, including attaching and downloading documents/files from emails.
- 4. Save files in commonly used word processing formats (.doc, .docx, .rtf).
- 5. Copy and paste text and other items on a computer.
- 6. Save and retrieve documents and files on your computer.
- 7. Locate information on the internet using search engines.



Course Content and Outcomes Guide

<u>DATE</u> : SUBMITTED BY:	2/14/2014 Jeff Sherman/Emily Henry/Lori Gates
COURSE NUMBER:	FST 252
COURSE TITLE:	Wine Making Laboratory
CREDIT HOURS:	1

LECTURE HOURS: LECTURE/LAB HOURS: LAB HOURS: 30

SPECIAL FEE:

COURSE DESCRIPTION and PREREQUISITES:

Produce grape wines according to vinification protocols. Includes grape handling and vinification practices as well as chemical and sensorial grape must and wine analysis. Prerequisite(s): 21 years of age or older.

ADDENDUM TO COURSE DESCRIPTION:

No book is required to be required but some books may be suggested as good supplemental reading for the course depending on student interests.

The purpose of this class is to give a broad overview of the various methods used in the production of wine. Labs will cover the history, viticulture, chemistry, and technology of table wine making as well as sparkling and dessert wines. Subjects will be first introduced then further developed in labs.

INTENDED COURSE OUTCOMES:

- 1. Apply various methods used in the production of wine.
- 2. Describe history, viticulture, chemistry, and technology of wine making.
- 3. Produce grape wines according to vinification protocols.
- 4. Apply grape handling and vinification practices.

OUTCOME ASSESSMENT STRATEGIES:

Student learning outcomes will be evaluated through a variety of means, including (but not limited to) some or all of the following:

- Lab assignments and/or reports
- Exams
- Presentations



COURSE CONTENT (Themes, Concepts, Issues) and SKILLS:

- History of Winemaking
- Viticulture and Grape Varieties
- Basic Chemistry Review and Primary Fermentation
- Harvest sampling, basic juice analysis
- White Wine Harvesting and Crush
- White wine harvest, pressing, juice treatment
- Red Wine Harvesting, Crush, and Malolactic Fermentation
- Red wine harvest and crushing
- Wine Chemistry
- Wine Additives & Sulfur Dioxide
- Tasting Analytically & Sensory Evaluation
- Wine Processing & Cellar Procedures
- Barrels and Aging
- Finning Agents & Winery Sanitation
- Post fermentation wine treatment & Fining
- Wine Blending & Bottling
- Wine defects & winery sanitation
- Sparkling & Dessert wines
- Wine Law & Alcohol and Health

OUTCOMES CROSSWALKS

Identify which course outcome aligns to individual program learning outcomes. It is possible that all program outcomes may not be address by the course outcomes.

Course Outcomes	Program Outcomes				
Students who complete this course should be able to:					
1. Apply various methods used in the production of wine.	Perform critical reasoning,				
2. Describe history, viticulture, chemistry, and technology of wine making.	perceive assumptions, and make judgments based on				
3. Produce grape wines according to vinification protocols.	the basic principles of				
	agriculture, natural resources, and related fields.				
4. Apply grape handling and vinification practices.	 Exhibit critical thinking skills when addressing issues in agriculture, natural resources, and related fields. 				
Identify which course outcome aligns to individual institutional learning outcomes					
(ILOs). It is possible that all ILOs may not be address by the course outcomes.					



Course Outcomes	ILOs
Students who complete this course should be able to:	
1. Apply various methods used in the production of wine.	ILO #13 Demonstrate the
 Describe history, viticulture, chemistry, and technology of wine making. 	knowledge, skills, and professional attitude necessary to enter and succeed in a defined profession or advanced academic program.
3. Produce grape wines according to vinification protocols.	ILO #8 Analyze and evaluate information to address issues and solve problems.
4. Apply grape handling and vinification practices.	ILO #9. Develop creative responses to ideas and information.

Lesson Plan: Viticulture and Grape Varieties

Objectives:

- Gain an appreciation for the breadth of grape varieties in the world
- Understand grape varieties in the northwest
- Explore organic grape production
- Understand basic annual vine maintenance

Readings:

http://extension.uidaho.edu/bonner/files/2013/09/NIFRC GrapeVarieties.pdf

Activities:

- Students will be part of a pruning exercise during the tour of the Willamette Valley

Grape Varieties for the Inland Northwest & Intermountain West

Danny L. Barney, Ph.D.

Expected Yield: 6 to 10 pounds per vine **Age to maturity:** 4 years **Productive life:** 30+ years **Hardiness:** +5 to -25 F, depending on type and cultivar **Optimum pH:** 6.0 - 7.0 **Spacing:** 5 to 6 feet apart in rows 8 to 10 feet apart

North American, European, and Hybrid Grapes

There are several types of grapes, each named after their place of origin. European grapes have been grown in cultivation throughout recorded history. Wine is the primary use for European grapes, but the fruit can be used for eating out of hand, raisins, and juice. They are native to the Mediterranean and are adapted to mild climates. With the exception of a few locations in Idaho, European grapes are too cold tender to be grown here. If you absolutely must have European grapes and you live in a colder area, try growing the grapes in large tubs fitted with trellises. After the vines become dormant in the late fall, place the tub into an unheated garage or porch where the temperature will remain between 30 and 40 F. A few of the hardier European cultivars are grown in southeastern Idaho, near Boise. Even in this relatively warm location, winter injury is a chronic problem.

North American grapes were bred from native species. The cultivars listed below are more cold hardy than their European cousins. Uses include eating out of hand, juice, preserves, pastries, and wine. American cultivars are the most reliable for Idaho growers.

French-American hybrid grapes are crosses between American and European grapes. Most were bred in French, but a few came from Germany. They are used mostly for juice and wine, and have intermediate cold hardiness. They can be grown in southeastern Idaho around Boise and Twin Falls, near Lewiston, and in a few northern Idaho locations.

Seedless grapes come from various parents. They are used mostly for eating out-of-hand and raisins, but also make excellent juices, preserves, and pastries.

Heat Units

The tables of recommended cultivars below refer to heat units. The term simply refers to the amount of heat a particular cultivar needs to ripen a crop. Early-ripening cultivars and those adapted to cool, short-season locations require fewer heat units than cultivars that ripen later and are adapted to warmer locations. The following table shows the average heat units received by selected Idaho communities.

City	Heat Units	City	Heat Units
Ashton	1,300	Moscow	1,650
Blackfoot	2,000	Mountain Home	2,700
Boise	2,650	Payette	2,900
Burley	2,200	Pocatello	2,100
Coeur d'Alene	1,600	Rexburg	1,700
Idaho Falls	1,800	Salmon	1,900
Kellogg	1,800	Sandpoint	1,500
Lewiston	2,700	Stanley	500
Malad	1,900	Twin Falls	2,000
McCall	950		

Seedless Grapes

Cultivar	Color	Cold Hardiness (degrees F)	Heat Units	Ripens	Comments
Canadice	red	-15 to -25	1500-2500	3-4	One of the most reliable grapes for northern Idaho. Used fresh and for juice, jelly, and wine.
Concord Seedless	bluish black	-15 to -25	2000-2500	5	A seedless sport of Concord, with slightly smaller berries. Used fresh and for preserves, pastries, juice, and wine.
Cultivar	Color	Cold Hardiness	Heat Units	Ripens	Comments

		(degrees F)			
Himrod	white	0 to -15	1500-2500	3-4	For warm areas, such as Lewiston and southwestern Idaho. Used fresh and for juice and raisins.
Interlaken Seedless	white	+5 to -5	1500-2500	3	For warm areas, such as Lewiston and southwestern Idaho. Used fresh and for raisins.
Reliance	red	-15 to -25	1500-2500	3-4	Used fresh and for juice and preserves.
Heat units refers to the amount of heat a cultivar requires during the growing season to ripen the fruit. Ripening dates: 1 = early summer, 2 = mid summer, 3 = late summer, 4 = early fall, 5 = late fall.					

North American Grapes

Cultivar	Color	Cold Hardiness (degrees F)	Heat Units	Ripens	Comments
Campbell's Early	red	-15 to -25	1500-2500	3-4	One of the most hardy and reliable grapes for northern Idaho. Fruit resembles Concord.
Catawba	red	-10 to -20	2500-3000	5	Requires a long growing season. Used fresh and for preserves and wine.
Concord	bluish black	-15 to -25	2000-2500	5	Cold hardy but requires a long growing season. Used fresh and for jellies, juice, and wine.
Delaware	red	0 to -10	2000-2500	5	For table, juice, and wine.
Cultivar	Color	Cold Hardiness (degrees F)	Heat Units	Ripens	Comments

Niagara	white	-5 to -15	2000-2500	5	For table, juice, and wine.
Steuben	bluish black	-10 to -20	2500-3000	5	Requires a warm, long growing season. Used fresh and for juice and wine.
Heat units refers to the amount of heat a cultivar requires during the growing season to ripen the fruit. Ripening dates: 1 = early summer, 2 = mid summer, 3 = late summer, 4 = early fall, 5 = late fall.					

French-American Hybrid Grapes

Cultivar	Color	Cold Hardiness (degrees F)	Heat Units	Ripens	Comments
Aurore	white	-5 to -15	2000-2500	3	One of the earliest-ripening grapes. Tight clusters create problems with fruit rot. Used fresh and for juice and wine.
Chancellor	bluish black	0 to -10	2000-2500	4	Used to make a red wine.
Chelois	bluish black	+5 to -5	2000-2500	4	Used for wine.
De Chaunac	bluish black	0 to -10	2000-2500	4	Used to make a red wine.

Cultivar	Color	Cold Hardiness (degrees F)	Heat Units	Ripens	Comments
----------	-------	-------------------------------	------------	--------	----------

Foch (Marechal Foch)	bluish black	-5 to -15	2000-2500	3-4	One of the most reliably winter hardy grapes for northern Idaho. Used for juice and to make a red wine. Berries are small and many clusters only partially fill under North Idaho conditions	
Rosette	bluish black	-5 to -15	2000-2500	5	Used for blended wines.	
Seibel	pink	+5 to -5	2000-2500	3	Used for a Chardonnay-type wine.	
Verdelet	white to yellow	+5 to -5	2000-2500	2-4	For table use and wine.	
Heat units refers to the amount of heat a cultivar requires during the growing season to ripen the fruit. Ripening dates: 1 = early summer, 2 = mid summer, 3 = late summer, 4 = early fall, 5 = late fall.						

European Grapes

Cultivar	Color	Cold Hardiness (degrees F)	Heat Units	Ripens	Comments	
Cabernet Sauvignon	purplish black	+10 to 0	2000-3000	5	Requires a very long growing season. Used to make a red wine.	
Chardonnay	white	+5 to -5	2000-3000	3	Used for wine.	
Gewürztraminer	pinkish red	+10 to 0	2000-3000	3	Used for juice and wine.	
Pinot Noir	blue	+10 to 0	2000-2500	3-4	Used to make a pinkish-red wine.	
Sylvaner	white	+5 to -5	2000-3000	3-4	Used for wine.	
White Riesling	white	+5 to -5	2000-3000	5	Used for wine	
Heat units refers to the amount of heat a cultivar requires during the growing season to ripen the fruit. Ripening dates: 1 = early summer, 2 = mid summer, 3 = late summer, 4 = early fall, 5 = late fall.						

Lesson Plan: Wine Defects & Winery Sanitation

Objectives:

- Develop a working knowledge of microbial growth as it relates to wine defects
- Be able to demonstrate correct sanitation practices
- Practice tasting wine for specific defects

Readings:

http://enologyaccess.org/Resources/VEN124/VEN124_16.htm

ENOLOGYACCESS.ORG Worldwide Source of Current Enological Research Institutes Resourc MvE VEN124 - Introduction to Wine Production iticulture & Enology V&E Author: Linda F. Bisson, UC Davis < back index next > Section 5 - Post-Fermentation Processing Lecture 16: Microbial Stability of Wine and Winery Sanitation MICROBIAL STABILITY GOAL: To prevent microbial growth and/or metabolism especially in the bottle to prevent both turbidity and off- character production Prevention of microbial growth not only eliminates turbidity but also avoids the production of microbial off-characters. Spoilage Organisms Bacteria Yeast Molds Microbial spoilage may be caused by bacteria, yeasts or molds. There are several bacterial species that can be problematic. I. Wine Spoilage Bacteria

- Bacterial Agents of Spoilage:
 - Lactic Acid Bacteria
 - Acetic Acid bacteria
 - Bacillus
 Streptomyces

Activities:

- Students will assist in sanitation practices of a winery during the tour of the Willamette Valley. Students will be able to taste for defects during the tour.

Assignment: Winery Business Plan

Develop a winery business plan for "your" winery which will be opening in 2017. Be prepared to present the plan (PowerPoint or other presentation method encouraged) to the class during Weeks 9 and 10. You will have 10-15 minutes to present and please make the presentation creative and interactive.

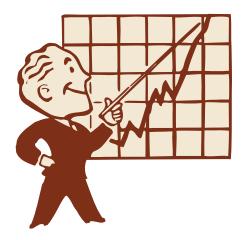
A dry example of the written plan can be found at: <u>http://dyson.cornell.edu/outreach/extensionpdf/2002/Cornell_AEM_eb0207.pdf</u>

Writing a Business Plan: An Example for a Small Premium Winery

An example of a business plan written for a small premium winery in the Finger Lakes Region of New York

by

Mark E. Pisoni and Gerald B. White



Department of Applied Economics and Management College of Agriculture and Life Sciences Cornell University, Ithaca, New York 14853-7801

It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

Table of Contents

INTRODUCTION 1
EXAMPLE BUSINESS PLAN 3
EXECUTIVE SUMMARY
BUSINESS DESCRIPTION:
PLAN OF OPERATIONS
MANAGEMENT TEAM
INDUSTRY ANALYSIS:
Competitor Analysis
MARKETING PLAN
FINANCIAL PLAN
<i>APPENDIX</i>
REFERENCES

Writing a Business Plan: An Example for a Small Premium Winery

By Mark E. Pisoni and Gerald B. White*

INTRODUCTION

This is the second publication directed toward helping vintners and prospective investors to develop a business plan for a premium winery in New York State. (The first publication was Pisoni and White, Writing a Business Plan: A Guide for Small Premium Wineries, E. B. 2002-06). The first bulletin was a template for developing a business plan for a small premium winery in New York State.

The main aim of this bulletin is to serve as an example of a business plan, developed using the format from EB 2002-06, that demonstrates the marketing potential and the financial feasibility for a winery producing premium wines that sell at price points above \$20 per bottle. The plan has three major components.

The first component emphasizes the plan of operations and the management team for the example winery.

The second component is the development of a marketing strategy that will differentiate the premium product from other wines in the market. This differentiation is aimed at enabling the premium producer to market wines at prices not yet received by many New York wineries. Emphasis will be placed on various aspects of product offering, price, promotion, and distribution strategies. In particular, emphasis will be devoted to developing alternative distribution outlets. It is hypothesized that New York producers must emphasize different marketing channels, not relying only on sales at the tasting room, to be successful in the premium category.

The third component of the example business plan estimates the investment and operating costs for a small winery producing the highest quality Pinot Noir. To ensure efficient use of the winery's facilities and to meet current market demands, the proposed winery will also produce small high quality lots of Chardonnay, Riesling, and Cabernet Franc. This production strategy will allow the winery to best use its equipment and distribute through

*The authors are former Graduate Assistant, Department of Applied Economics and Management, Cornell University, currently with the management team of Pisoni Vineyards and Winery, Gonzales, CA; and Professor, Department of Applied Economics and Management, Cornell University. This project was funded by a grant from the New York State Department of Agriculture and Markets "Grow NY" Program and a subcontract through the Research Committee of the Finger Lakes Pinot Noir Alliance. Appreciation is expressed to Bob Pool for his review and helpful suggestions on an earlier draft of this publication. the optimal marketing channels. Winery equipment needs in the example plan were developed through consultations with premium California producers and representatives of equipment suppliers. The equipment component list was then refined to fit the New York situation by consultations with Thomas Henick-Kling, Thomas Cottrell and members of the Research Committee of the Finger Lakes Pinot Noir Alliance. The Research Committee also helped to specify the retail prices and the allocation percentages to the three distribution channels (winery tasting room, direct to retailers, and distributors).

The overall goal of the project was to develop an optimal marketing strategy, enological and viticultural practices, and evaluate the economic feasibility for producing an ultra premium Pinot Noir varietal wine in New York State. Specific objectives were

- 1) To develop a strategy for successfully marketing ultra premium wines from New York State priced at higher price points (i. e. \$20 per bottle) than most wineries are now attaining,
- 2) To develop cash flow estimates for 10 years in the development of the prototype winery to determine the economical potential.
- 3) To assess the risk of investment in the model winery to economic parameters such as wine prices, interest rates, grape prices, and equipment costs.

For vineyard practices and costs for these premium vinifera varietals, see White and Pisoni, Cost of Establishment and Production of Vinifera Grapes in the Finger Lakes Region of New York, 2001 (E.B. 2002-01).

Potential Use

This example business plan can be used by individual firms to develop estimates for their own operations. The close working relationship with the Finger Lakes Pinot Noir Alliance's Research Committee helps to ensure that the final prototype plan is adaptable to the New York situation. The results can be of immediate use to the members of this group who either already have, or will soon, develop their individual plans for attaining premium Pinot Noir production.

It should be emphasized that the financial feasibility analysis shown in this publication <u>is not meant to represent the financial performance of an average small farm winery in</u> <u>New York.</u> The situation in the example plan is different in several respects from the average New York winery. First, production is limited to about 9,000 cases using high quality vinification methods and top of the line equipment; secondly, production is totally from vinifera varieties; and thirdly, price points are higher than those being attained by most New York wineries. The ultimate aim is to develop a strategy for eventually breaking out of heavy reliance on tasting room sales direct to consumers. (The concept of this business plan is not to represent what the New York wine industry is now, but what it could be in the future for some wineries who are paying the utmost attention to quality and marketing strategy.)

Assignment: Oregon Wine Law Summary Paper

In a one page summary, provide a brief explanation of the Oregon laws in regard to wine production. The report should acknowledge where you found the information and reflect your opinion of the laws.

Assessment: Wine Quiz

(example from wine-pages.com)

1: The Albariño grape usually makes what style of wine?

- Red wine
- White wine
- Rose wine
- Fortified wine
- Sparkling wine

2: The Bekaa Valley is the main wine region of:

- Israel
- Egypt
- Morocco
- Lebanon
- Tunisia

3: Which two are often blended together?

- ^O Shiraz and Viognier
- Merlot and Chardonnay
- Semillon and Pinot Noir
- Cabernet Sauvignon and Sauvignon Blanc
- ^O Godello and Grenache

4: Which wine is produced in the Minho region?

- Portuguese Vinho Verde
- Chinese dragon wine
- Brazilian sparkling wine
- Croatian Grasevina
- ^O Cypriot Commandaria wine

5: Lodi is a wine region. But where is it?

- Chile
- New York State
- Uruguay
- California
- Argentina

6: Columella and Secateurs are wines from which South African wine region?

- C Robertson
- Swartland
- Elgin
- Durbanville Hills
- Constantia

7: Which of these is used in Biodynamic grape farms?

- A ram's horn filled with quartz
- A stag's bladder soaked in herbal tea
- A Findus frozen lasagne
- A cow's horn filled with manure

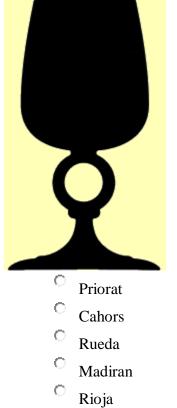
8: Which acid is abundant in ripe wine grapes?

- Tartaric acid
- Citric acid
- Acetic acid
- Ascorbic acid
- Butyric acid

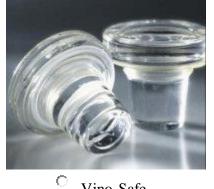
9: Sauvignon is the most important grape of:

- The Loire
- The Jura
- The Ardeche
- ^O The Rhone
- The Roussillon

10: Which wine region promotes its wines using this distinctive glass?



Bonus: What is this glass bottle stopper called?



- Vino-Safe
- \odot Vino-Clear
- $^{\circ}$ Vino-Glass
- $^{\circ}$ Vino-Keeper
- $^{\circ}$ Vino-Lok

Assessment: Oregon Wine Law Summary Paper Rubric

	"A" Paper	"B" Paper	"C" Paper	"D" Paper	"F" Paper
Grammar and	Perfect	A few minor	Edits needed	Obvious lack of	Complete
Punctuation	grammar and	edits		grammar and	absence of
	punctuation			punctuation	grammar and
					punctuation
Sources	Yes		In		No
accurately			bibliography,		
cited			but not text		
Overall	Student clearly	One page	One page	One page	Complete lack
structure of	translates the	paper covered	paper covered	paper covered	of assignment
the paper	Oregon laws	necessary laws	necessary laws	necessary laws	understanding
	into language	accurately, and	accurately, and		
	which would	student	student		
	be easily	offered	offered		
	understood by	opinion which	opinion		
	the public.	would easily			
		translate to			
		the public			

Equal Employment Opportunity

CASE is a WIA Title I- financially assisted program and is therefore an equal opportunity employer/program which provides auxiliary aids and services upon request to individuals with disabilities by calling 711 or 800.648.3458 TTY.

US Department of Labor

The CASE grant project (\$18,679,289) is 100% funded through the US Department of Labor's Trade Adjustment Assistance Community College and Career Training program.

DOL Attribution

This workforce solution was funded by a grant awarded by the US Department of Labor's Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the US Department of Labor. The Department of Labor makes no guarantees, warranties or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability or ownership.

This work is licensed under a Creative Commons Attribution 4.0 International License.

