

ACCEIVED

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OFFICE OF THE GENATE COUNCIL

#### 1. General Information

1a. Submitted by the College of: AGRICULTURE, FOOD AND ENVIRONMENT

Date Submitted: 1/21/2015

1b. Department/Division: Horticulture

1c. Contact Person

Name: Jeff Wheeler

Email: jeff.wheeler@uky.edu

Phone: 859-494-2311

Responsible Faculty ID (if different from Contact)

Name: Seth DeBolt

Email: seth.debolt@uky.edu

Phone: 859-257-8654

1d. Requested Effective Date: Semester following approval

1e. Should this course be a UK Core Course? No

# 2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: PLS 336

2c. Full Title: Introduction to Viticulture - Grape Production

2d. Transcript Title: Intro to Viticulture

2e. Cross-listing:

2f. Meeting Patterns

LECTURE: 3

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 3

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

2j. Course Description for Bulletin: This class is designed for students interested in pursuing a career in the commercial grape and wine industry. Topics to be discussed include: history of grape production in Kentucky, basic grapevine physiology and anatomy, vineyard design and establishment, important pathogens of grapevines, and economics of grape production. Lecture, three hours per week.

# KENTUCKY

### **New Course Report**

- 2k. Prerequisites, if any: None
- 21. Supplementary Teaching Component:
- 3. Will this course taught off campus? Yes

If YES, enter the off campus address: U.K. Horticulture Research Farm - 4321 Emmert Farm Lane - Lexington KY, 40514

4. Frequency of Course Offering: Spring,

Will the course be offered every year?: Yes

If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: Yes

If No, explain:

- 6. What enrollment (per section per semester) may reasonably be expected?: 30
- 7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: No

Will it be of interest to a significant number of students outside the degree pgm?: Yes

If Yes, explain: This course will provide a base knowledge of wine production practices that will be valuable to students in the wide range of both social and professional environments.

8. Check the category most applicable to this course: Relatively New - Now Being Widely Established,

If No, explain:

- 9. Course Relationship to Program(s).
  - a. Is this course part of a proposed new program?: Yes

If YES, name the proposed new program: Undergraduate Certificate in Distillation, Wine, and Brewing Studies (DWBS)

b. Will this course be a new requirement for ANY program?: No

If YES, list affected programs:

- 10. Information to be Placed on Syllabus.
  - a. Is the course 400G or 500?: No
- b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from **10.a** above) are attached: Yes

## **Distance Learning Form**

Instructor Name:

Instructor Email:





## New Course Report

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

- 2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.
- 3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.
- 4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

- 5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?
- 6. How do course requirements ensure that students make appropriate use of learning resources?
- 7.Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.
- 8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (http://www.uky.edu/UKIT/)?
- 9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

- 10.Does the syllabus contain all the required components? NO
- 11.I, the instructor of record, have read and understood all of the university-level statements regarding DL.

#### Instructor Name:

SIGNATURE|RHOUTZ|Robert L Houtz|PLS 336 NEW Dept Review|20141107

SIGNATURE|LGRABAU|Larry J Grabau|PLS 336 NEW College Review|20150121

SIGNATURE|JMETT2|Joanie Ett-Mims|PLS 336 NEW Undergrad Council Review|20150331

Courses	Request Tracking

#### **New Course Form**

Open ir	n full window to print or save				
tachmen	nts:	Upload Fite			
	[(::Diotiocaria)				
II	D Attachment 16 PLS 336 UGC Review Checklist.d	004			
	20 PLS 336 Syllabus Introduction to				
	First 1 Last				
lect save	d project to retrieve		Get New		
	,				
		(*denotes	required fields)		
	ral Information				
a.	* Submitted by the College of: AGRICUL	TURE, FOOD AND ENVIRON	MENT Submission Date: 1/21	/2015	
b.	* Department/Division: Horticulture		<u> </u>		
C.	t O - to at Daggara Name	Jeff Wheeler	Email: jeff.wheeler@uky.edu	Phone: 859-494-2311	
	* Contact Person Name:  * Responsible Faculty ID (if different fro		Email: seth.debolt@uky.edu	Phone: 859-257-8654	
			- · · · · · ·		
	* Requested Effective Date:	er following approval OR 🖰 :	Specific Term/Year +		
e.	Should this course be a UK Core Course	e? ⊜Yes ® No			
	If YES, check the areas that apply:	(a) 100 (b) 110			
	🖺 Inquiry - Arts & Creativity	Composition & Commu	nications - II		
	_	Quantitative Foundation			
	☐ Inquiry - Humanities				
	☐ Inquiry - Nat/Math/Phys Sci	Statistical Inferential Re			
	☐Inquiry - Social Sciences	U.S. Citizenship, Comm	nunity, Diversity		
	Composition & Communications -	I ☐ Global Dynamics		•	
2. Desig	nation and Description of Proposed C	Course.			
a.	* Will this course also be offered through	h Distance Learning? ① Yes	4_ <b>®</b> No		
b.	* Prefix and Number: PLS 336			<del></del> .	
c	* Full Title: Introduction to Viticulture - G	irage Production			
	Transcript Title (if full title is more than 4		re		
	To be Cross-Listed <sup>2</sup> with (Prefix and No.				
	* Courses must be described by at leas		helow Include number of actual cor	ntact hours <sup>3</sup> for each meeting r	atte
1.	3 Lecture	Laboratory <sup>1</sup>	Recitation	Discussion	
	Indep. Study	Clinical	Colloquium	Practicur	n
	Research	Residency	Seminar	Studio	
	Other	If Other, Please explain:	!		
g.	* Identify a grading system:				
	Letter (A, B, C, etc.) Pass/Fail				
	Medicine Numeric Grade (Non-medi	cal students will receive a lette	er grade)		
	© Graduate School Grade Scale  * Number of credits: 3				

	j.	* Course Description for Bulletin:	
		This class is designed for students interested in pursuing a career in the commercial grape and wine industry. Topics to be discussed include: history of grape production in Kentucky, basic grapevine physiology and anatom vineyard design and establishment, important pathogens of grapevines, and economics of grape production. Lectuthree hours per week.	₹r ce,
	k.	Prerequisites, if any:	—
	1	Supplementary teaching component, if any: ② Community-Based Experience ③ Service Learning ⑤ Both	
•			
3,		this course be taught off campus? ● Yes ○ No c, enter the off campus address: U.K. Horticulture Research Farm - 4321 Emmert Farm Lane - Lexington KY, 40514	
4.		ency of Course Offering.	
	•	*Course will be offered (check all that apply): ☐ Fall ☑ Spring ☐ Summer ☐ Winter	
		*Will the course be offered every year?	
	υ.	If No, explain:	
_	8 A = 0	facilities and personnel necessary for the proposed new course available? ● Yes ○ No	
Э.		explain:	
	İ		
	!		
6.	* Wha	t enrollment (per section per semester) may reasonably be expected?   30	•
7.	Antici	pated Student Demand.	
	a.	* Will this course serve students primarily within the degree program? ① Yes ⑨ No	
	b.	* Will it be of interest to a significant number of students outside the degree pgm?	
		If YES, explain:	
		This course will provide a base knowledge of wine production practices that will be valuable to students in the wide range of both social and professional environments.	3
8.	* Che	ck the category most applicable to this course:	
		uditional – Offered in Corresponding Departments at Universities Elsewhere latively New – Now Being Widely Established	
	□No	t Yet Found in Many (or Any) Other Universities	
9.	Cours	se Relationship to Program(s).	
	a.	* Is this course part of a proposed new program?	
		If YES, name the proposed new program:  Undergraduate Certificate in Distillation, Wine, and Brewing Studies (DWBS)	
		* Will this course be a new requirement <sup>5</sup> for ANY program? ① Yes ② No	
		* will this course be a new requirement —for ANY program? ○ Yes ⊕ No  If YES <sup>5</sup> ., list affected programs::	
			.,
0.		nation to be Placed on Syllabus.	
	a.	* Is the course 400G or 500? ① Yes ② No If YES, the differentiation for undergraduate and graduate students must be included in the information required in 10.b. You must include: (i) id additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See	enti SR
	b.	* The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if a	ıppl

10.a above) are attached.

III Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received. III The chair of the cross-listing department must sign off on the Signature Routing Log.

Ungeneral, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per weak for a semester, exclusive of any leboratory meeting. Laboratory meeting, generally, no two hours per week for a semester for one credit hour. (from SR 5.2.1)

We you must also submit the Distance Learning Form in cords for the proposed course to be considered for DL delivery.

In order to change a program, a program change form must also be submitted.

Rev 8/09

Submit as New Proposal Save Current Changes

## Course: PLS 336 University Senate Syllabi Gui

# **University Senate Syllabi Guidelines Review Checklist**

Included make-up opportunities for students with excused

General Course Information				
☐ Full and accurate title of the course	Course prefix, number and section number			
Departmental and college prefix	Scheduled meeting day(s), time and place			
	Source meeting and to have been			
Instructor Contact Information (if specific details are	e unknown, "TBA" is acceptable for one or more fields)			
N Instructor name	Office address			
Contact information for teaching/graduate	UK email address			
assistant, etc.	Times of regularly scheduled office hours and if			
Preferred method for reaching instructor	prior appointment is required			
Office phone number	<b>F</b>			
<u> </u>				
Course Description				
🔀 Reasonably detailed overview of the course (cou	urse description should match on syllabus and eCATS form)			
igwedge Prerequisites, if any (should match on syllabus a	and eCATS form)			
Student learning outcomes				
Course goals/objectives				
igttee Required materials (textbook, lab materials, etc.)				
Outline of the content, which must conform to th	ne Bulletin description			
$igtieq$ Summary description of the components that $\operatorname{cc}$	ontribute to the determination of course grade			
igwedge Tentative course schedule that clarifies topics, s	$\overline{igwedge}$ Tentative course schedule that clarifies topics, specifies assignment due dates, examination date(s)			
Final examination information: date, time, dura	tion and location			
igotimes For 100-, 200-, 300-, 400-, 400G- and 500-level $lpha$	ourses, numerical grading scale and relationship to			
letter grades for undergraduate students				
For 400G-, 500-, 600- and 700-level courses, nun				
grades for graduate students. (Graduate student				
Relative value given to each activity in the calcu	lation of course grades (Midterm=30%; Term			
Project=20%, etc.)  Note that undergraduate students will be provided with a Midterm Evaluation (by the midterm				
date) of course performance based on criteria in				
Policy on academic accommodations due to disa				
	quires academic accommodations, please see me as soon as			
	rder to receive accommodations in this course, you must			
provide me with a Letter of Accommodation	n from the Disability Resource Center (Room 2, Alumni Gym,			
257-2754, email address jkarnes@email.uky	y.edu) for coordination of campus disability services available			
to students with disabilities.				
	UGE Review ( )			
	Class Participation section should be revised to clarify that			
	points will not be reduced for students who have excused			
	absences			

absences

	Committee Review ( )
Course Policies	Comments
★ Attendance	
Excused absences	
Make-up opportunities	
☐ Verification of absences	
Submission of assignments	
Academic integrity, cheating & plagiarism	
Classroom behavior, decorum and civility	
Professional preparations	
Group work & student collaboration	

# Introduction to Viticulture: Grape Production

# Course Syllabus

#### **Course Information:**

Course Number: PLS 336 Semester: Spring 2016

Class days & time: Tuesday (3:00 - 5:30pm)

Classroom: University of Kentucky Horticulture Research Farm

#### **Instructor Information:**

Jeff Wheeler Agriculture Science Center N-308D 859-494-2311 jeff.wheeler@uky.edu Office Hours (by appointment)

#### **Course Description:**

This class is designed for students interested in pursuing a career in the commercial grape and wine industry. Topics to be discussed include: history of grape production in Kentucky, basic grapevine physiology and anatomy, vineyard design and establishment, important pathogens of grapevines, and economics of grape production. The classroom used for this course is located at the University of Kentucky Horticulture Research Farm, where student will receive hands on field laboratory instruction as well as traditional classroom lectures. Lecture, three hours per week.

#### Course Goals:

- 1. To provide knowledge of basic grapevine physiology and anatomy relevant to the successful cultivation of both wine and table grapes.
- 2. To provide an understanding of the biotic and abiotic factors that limit commercial grape production.
- 3. To provide skills required to successfully establish and maintain a commercial vineyard.

#### Student Learning Outcomes

By the end of the course, students should be able to:

- 1. Describe the limitations to successful grape production in the Eastern USA, and explain how these limitations affect cultivar selection.
- 2. Summarize the important factors involved in determining vineyard site selection
- 3. Describe the steps involved in vineyard design and installation, and explain the effect of vineyard design on canopy management and vineyard productivity.
- 4. Describe the important characteristics of specific grapevine cultivars adapted to the climate and soils of Kentucky.
- 5. Demonstrate the ability to successfully propagate grapevines.
- 6. Demonstrate the ability to successfully plant and prune dormant grapevines.
- 7. Demonstrate the ability to successfully shoot thin grapevines.
- 8. Describe commercially significant pests and pathogens of grapevines, and identify suitable methods to reduce damage each may cause to a commercial vineyard.

#### **Required Textbooks:**

Wine Grape Production Guide for Eastern North America. 2008. Wolf, T. K. Natural Resource, Agriculture & Engineering Service (NRAES) Cooperative Extension. ISBN: 139781933395128.

Winter Injury to Grapevines and Methods of Protection. 2007. Zabadal et. al. Michigan State University, Extension Bulletin E2930.

#### Recommended but not Required Textbooks:

Sunlight into Wine. 2003. Smart, R., and M. Robinson. Winetitles. ISBN: 13978-1875130108.

Flowering and Fruitset of Grapevines. 2004. May, P. Lythrum Press South Australia. ISBN: 0975126067.

#### Relative Value of Assessments Toward Course Grade:

Components of the course that will contribute to the determination of the course grade include 3 separate examinations that will account for 75% of a students' grade as well as an attendance/participation score that will account for 25% of the final grade. Grades will be based on both Exams and Class participation.

Assessment	Number of points	Percentage of Course Grade
Exam 1	100	25%
Exam 2	100	25%
Final Exam	100	25%
Class Participation	100	25%
Total	400	100%

#### **Class Participation:**

Students are expected to be present, on time, engaged and actively participate in class discussion. Attendance will be taken at the beginning of each class period. Each unexcused absence will reduce a students' Final grade by 6pts = 1.5% (see "Excused Absences and Verification" below). Students have one week following excused absence to contact instructor regarding missed graded work.

#### **Grade Scale:**

Final course grades are assigned according to the following criteria.

Course Grade	Percentage	Points
Α	90% or better	360 – 400
В	80 – 89%	320 – 359
С	70 – 79%	280 – 319
D	60 – 69%	240 – 279
E	Below 60%	Less than 240 points

#### Exams:

Exams will include a combination of multiple choice and short answer questions. Material covered on each exam will be cumulative. Students are encouraged to challenge a question or discuss the grading of individual exams with the instructor. Make-up exams will be granted only if tests are missed for an excused absence (See description of Excused Absence and Verification below).

#### Mid-term Grade:

Mid-term grades will be posted in myUK by the deadline established in the Academic Calendar (http://www.uky.edu/Registrar/AcademicCalendar.htm)

#### **Excused Absences and Verification:**

Please see Student Rights and Responsibilities, Part II, Section 5.2.4.2 (<a href="http://www.uky.edu/StudentAffairs/Code/part2.html">http://www.uky.edu/StudentAffairs/Code/part2.html</a>) for UK's policy on excused absences.

Excused absences include (as defined at the web site above):

- Significant illness of student or serious illness of household member or immediate family
- · Death of a household member or immediate family
- Trips for members of student organizations, class excursions or participation in intercollegiate athletic events
- Religious holidays (see http://www.uky.edu/Ombud/ForFaculty\_ReligiousHolidays.php)
- Any other circumstance that the instructor finds reasonable cause for nonattendance

Students need to notify the professor of absences prior to class when possible. S.R. 5.2.4.2 defines the following as acceptable reasons for excused absences: (a) serious illness, (b) illness or death of family member, (c) University-related trips, (d) major religious holidays, and (e) other circumstances found to fit "reasonable cause for nonattendance" by the professor.

Students anticipating an absence for a major religious holiday are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day in the semester to add a class. Information regarding dates of major religious holidays may be obtained through the religious liaison, Mr. Jake Karnes (859-257-2754).

Students are expected to withdraw from the class if more than 20% of the classes scheduled for the semester are missed (excused or unexcused) per university policy.

Verification of Absences: Students may be asked to verify their absences in order for them to be considered excused. Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the family. Appropriate notification of absences due to university-related trips is required prior to the absence.

#### **Academic Accommodations:**

If you have a documented disability that requires academic accommodations, please see me as soon as possible. In order to receive accommodations in this course, you

must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, <u>ikarnes@uky.edu</u>) for coordination of campus disability services available to students with disabilities. We can then collaborate on the best solution.

#### **Academic Integrity, Cheating and Plagiarism:**

See the web page at the Office of Academic Ombud Services for a definition of plagiarism, how to avoid plagiarism, and UK's academic offense policy (http://www.uky.edu/Ombud/Plagiarism.pdf)

Please see: Student Rights and Responsibilities, Part II, Section 6.3 (<a href="http://www.uky.edu/StudentAffairs/Code/part2.html">http://www.uky.edu/StudentAffairs/Code/part2.html</a>) for UK's policy on academic integrity.

#### Classroom Behavior, Decorum and Civility:

Please be respectful to others in the class and prevent any unnecessary distractions by restricting personal communication unrelated to the current lecture topic. Please turn cell phones off during class.

#### **Proposed Lecture Topics and Schedule:**

- 1 History of Grape Production (January 19)
  - Course introductions discuss syllabus
  - Origin and global dissemination of Vitis species
  - Current major grape growing regions of the world
  - Overview of Viticulture in Kentucky
  - History of grape and wine production in KY (guest Tom Beall)
  - Current vineyard production statistics for KY
  - Limitations and potential future of grape production in KY
- 2 Grapevine Physiology and Anatomy (January 26)
  - Grapevine growth habit and vine structure identification
  - Vine balance
  - Photosynthesis carbohydrate: production, utilization and storage
- 3 Grapevine Physiology and Anatomy continued... (February 2)
  - Flowering and fruitset in grapevines
  - Fruit ripening fruitset to harvest
- 4 Winter Injury of Grapevines (February 9)
  - Acclimation and deacclimation of grapevines
  - Assessing winter injury to grapevines
  - Vineyard management used to prevent winter injury of grapevines
- **5 Exam 1-** (February 16)
  - Exam Covers material from lectures 1-4
- **6 Vineyard Site Selection** (February 23)
  - Climate and soil analysis
  - GIS and vineyard mapping
- 7 Propagation of Grapevines (March 1)
  - Green shoot propagation
  - Hardwood propagation
  - Bench grafting
- 8 Dormant Pruning (March 8)
  - Dormant pruning strategies to achieve vine balance
- 9 Spring Break (March 14 March 19)

#### 10 - Pathogens of Grapevines (March 22)

- Lifecycles of major insect pests
- Lifecycles of major fungal pests
- Important nematode and virus pests
- Invertebrate pests

#### **11 - Exam 2-** (March 29)

- Exam Covers material from lectures 1-9

#### 12 - Matching Site Selection and Cultivar Choice (April 5)

- Descriptions of commercially available grapevine cultivars and rootstocks
- Vineyard site selection using climate and soil analysis

#### 13 - Soil Preparation Prior to Planting a Vineyard (April 12)

- Improving soil water drainage
- Cover crops used during site preparation
- Soil amendments
- Weed control prior to planting
- Vineyard Design and Installation
- Vineyard trellis systems
- Vine planting
- Training and tying newly planted vines
- Weed control after planting
- Irrigation

#### 14 - Shoot Thinning and Cluster Thinning (April 19)

- Shoot and cluster thinning to achieve vine balance

#### 15 - Vineyard Economics (April 26)

- Grape grower and winery relations
- Written contracts vs. hand shake deals
- Cost analysis of investing money into a commercial vineyard enterprise
- Meet the Industry
- Discuss vineyard related job opportunities in KY with current wine industry leaders

#### 16 - Final Exam (May 2 - May 6) Date and time: TBA

- Final Exam Covers material from lectures 1-16