

May 30, 2017

LINDA BISSON, CHAIR

Viticulture and Enology Graduate Group

RE: Viticulture and Enology Degree Requirements

Enclosed is a copy of the Viticulture and Enology graduate degree requirements as approved by Graduate Council on May 26, 2017. These degree requirements are now the official requirements for the Viticulture and Enology Graduate Group and will be posted on the Office of Graduate Studies program webpage:

<https://grad.ucdavis.edu/programs/gven>

Thank you for your efforts on behalf of graduate education.

Sincerely,

A handwritten signature in black ink, appearing to read "N. Baumgarth". The signature is fluid and cursive, with a large loop at the end.

Nicole Baumgarth, Chair
Graduate Council

c: Amanda Kimball, Graduate Studies Analyst
Nicole Rabaud, Graduate Group Coordinator

VITICULTURE AND ENOLOGY M.S. DEGREE REQUIREMENTS

Revised: July 2016

Graduate Council Approval: May 26, 2017

Master's Degree Requirements

1) Admissions requirements:

Consideration for program admission requires a bachelor's degree, three letters of recommendation, official transcripts, GRE scores, TOEFL or IELTS score (if applicable) and Office of Graduate Studies online application with fee by the stated admission deadline. A minimum GPA of 3.0 is required. Admissions decisions are made on a case-by-case basis. The decision to recommend admission to the Dean of Graduate Studies will be made by the Viticulture & Enology Graduate Group Admissions Committee on the basis of available space and the competitiveness of applicants compared to the eligible pool.

a) Prerequisites

In addition to the admission requirements stated above, applicants are expected to have passed the equivalent of the following UC Davis courses:

General Area (UCD Equivalent)	Units
Biological Sciences (BIS 2A)	4
Chemistry (CHE 2A, 2B, 2C)	15
Economics (ECN 1A, 1B)	8
Organic Chemistry (CHE 8A, 8B)	6
Mathematics (MAT 16A and 16B, or 21A and 21B)	6-8
Biochemistry (BIS 102, 103, or 105)	3-6
Microbiology (MIC 102 and 103L)	4-7
Plant Sciences (PLS 2)	3
Statistics (STA 106, or PLS 120)	4
TOTAL	53-61

b) Deficiencies:

Course work deficiencies must be made up by the end of the first academic year following initial enrollment.

2) M.S. Plan I (Thesis) and Plan II (Comprehensive Examination)

Students will elect Plan I or Plan II during the Winter quarter of their first year.

Plan I. This plan requires a minimum of 46 units of graduate and upper division courses (the 100 and 200 series only) and, in addition, a thesis and an exit seminar are required. At least 27 of the 46 units must be VEN 299 research credits.

This Plan requires more units than the UC Davis minimum, which is:
30 units of graduate and upper division courses (the 100 and 200 series only), at least 12 of which must be graduate work in the major field.

Plan II. This plan requires 38 units of graduate and upper division courses, of which at least 20 units must be graduate courses in the major field, including 12 units of VEN 292 internship credits. A comprehensive final examination in the major subject is required of

each candidate. No thesis is required. The capstone requirement is fulfilled by successfully passing a comprehensive written exam in winter quarter of year 2. In addition, a written literature review and oral presentation are required.

This Plan requires more units than the UC Davis minimum, which is: 36 units of graduate and upper division courses, of which at least 18 units must be graduate courses in the major field. Not more than 9 units of research (299 or equivalent) may be used to satisfy the 18-unit requirement.

3) Course Requirements (Plan I: 46 units*; Plan II: 38 units*)

**Unit requirement does not include Background Courses.*

a) Background Courses

(Plan I and Plan II: units required vary depending on equivalent coursework taken prior to entering the program; these units do not count towards the total units required.)

In addition to the prerequisites, all students must have satisfactory background knowledge in Enology and Viticulture. Students may acquire this background information by taking the UC Davis courses listed below or by equivalent coursework from other Universities and Colleges, as approved by the Graduate Advisor. Students who have an undergraduate degree in the field will have completed most or all these background courses prior to entering the M.S. program. *Please note that due to the scarcity of VEN coursework worldwide, most students cannot acquire these background courses prior to admission to our program.*

- VEN123. Analysis of Musts and Wines (2 units)
- VEN123L. Analysis of Musts & Wines Laboratory (2 units)
- VEN124. Wine Production (2 units)
- VEN124L. Wine Production Laboratory (3 units)
- VEN125. Wine Types and Sensory Evaluation (2 units)
- VEN125L. Sensory Evaluation of Wine Laboratory (2 units)
- VEN126. Wine Stability (3 units)
- VEN126L. Wine Stability Laboratory (2 unit)
- VEN128. Wine Microbiology (2 unit)
- VEN128L. Wine Microbiology Laboratory (2 unit)
- (6 units from 101 A-C)
- VEN101A. Viticultural Practices (3 units)
- VEN101B. Viticultural Practices (3 units)
- VEN101C. Viticultural Practices (3 units)

One of the two courses below is required as background coursework if the Statistics prerequisite is not fulfilled.

- STA106. Applied Statistical Methods: Analysis of Variance (4 units)
- PLS120. Applied Statistics in Agricultural Science (4 units)

b) Required Courses (Plan I: 37 units; Plan II: 32 units)

Plan I Degree

- VEN135. Wine Technology/Winery Systems (4 units)
- VEN224. Advances in the Science of Winemaking (3 units)
- VEN 290. VEN Graduate Group Seminar (1 unit per qtr—3 units required)
- VEN 299. Research (27 units minimum required over the two year period with a maximum of 12 units per quarter; a minimum of 24 units must be with the Major Professor)

Plan II Degree

- VEN 135. Wine Technology/Winery Systems (4 units) VEN 224. Advances in the Science of Winemaking (3 units)
- VEN 290. VEN Graduate Group Seminar (3 units)
- VEN 292. Advanced Internship (12 units minimum required). *Internship must be approved and supervised by a graduate group faculty member or students major professor, but are arranged by the student. Students must file an internship report to receive credit.*
- VEN 298. Group study. Review of published data on a grape or wine topic, including a written literature review and oral presentation (4 units)
- Agricultural and Resource Economics or Graduate School of Management Upper Division or Graduate Level coursework (6 units minimum required), chosen in consultation with Graduate Advisor.

c) Elective Courses (Plan I: 9 units; Plan II: 6 units)

Elective units must be Graduate and/or Upper Division coursework in the major field, as approved by a Graduate Advisor.

d) Summary:

Plan I

Students are required to complete the background coursework, as needed, and 46 units of required and elective coursework (including research). Full-time students must enroll for 12 units per quarter including research, academic and seminar units. Courses that fulfill any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed, although the 12 units per quarter are generally fulfilled with a research class (299) and perhaps seminars. Per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

Plan II

Students are required to complete the background coursework, as needed, and 38 units of required and elective coursework (including an advanced internship). Full-time students must enroll for 12 units per quarter. Courses that fulfill any of the program course requirements may not be taken S/U unless the course is normally graded S/U. Once course requirements are completed, students can take additional classes as needed. Per UC regulations, students cannot enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

4) Special requirements:

N/A

5) Committees:

a) Executive Committee

The principal duties of the Executive Committee shall be to determine and implement administrative and educational policy for the Group and to represent the interests of the Group generally to various Universities and other agencies.

b) Admissions Committee

Once a completed application, all supporting material, and application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of at least two Committee members and one Admissions Committee Chair who are appointed by the Executive Committee from the membership of the Group. Based on a review of the entire application, a recommendation is made to accept or decline an applicant's request for

admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval of admission. Notification of admissions decisions will be sent by Graduate Studies. Applications are accepted through January 15 of each year for the Fall of the same year.

c) Thesis Committee (Plan I)

Thesis Committee: The student, in consultation with his/her major professor and graduate adviser, nominate two faculty members to serve on the Thesis Committee. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy. The major professor serves as Chair of the committee.

d) Comprehensive Examination Committee (Plan II)

The comprehensive examination committee shall consist of the faculty teaching in the background coursework series. The examination is administered by the Chair of the Graduate Group.

6) Advising Structure and Mentoring:

The **Major Professor** is a faculty member who has expertise in the student's chosen focal area (e.g., wine chemistry, wine microbiology, etc.) and who helps the student select coursework appropriate to meeting the student's career goals. For students following Plan I, the Major Professor supervises the student's research and is Chairperson of the thesis guidance committee.

The **Graduate Advisor**, who is appointed by Graduate Studies, is a confidential resource for information on academic requirements, policies and procedures, and registration information. The Graduate Advisor reviews and approves student petitions and progress until the student's coursework has been completed and the student's thesis committee has been formed (Plan I) or the comprehensive examination passed (Plan II), and continues to be a resource to students in case of academic difficulty or conflict.

The **Mentoring Guidelines** can be found in the Graduate Studies graduate student handbook and on the Viticulture & Enology Graduate Group Website under Information for Current Students/Policies and Documents:

http://vengg.ucdavis.edu/information-for-current-students/copy_of_department-policies-and-documents

<http://gradstudies.ucdavis.edu/gradcouncil/mentoring.pdf>

7) Advancement to Candidacy:

Every student must file an official application for Candidacy for the Degree of Master of Science after completing one-half of their course requirements and at least one quarter before completing all degree requirements, commonly during their 5th quarter. The Candidacy for the Degree of Master forms appropriate for each Plan can be found online at: <http://www.gradstudies.ucdavis.edu/forms/>. A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student's course plan after s/he has advanced to candidacy, the Graduate Advisor must recommend these changes to Graduate Studies. Plan I students must have their Graduate Advisor and Major Professor sign the candidacy form before it can be submitted to Graduate Studies. Plan II students must have their Graduate Advisor sign the candidacy form before it can be submitted to Graduate Studies.

If the candidacy is approved, the Office of Graduate Studies will send copies to the appropriate graduate staff person, the student, and the Thesis Committee Chair. If the Office of Graduate Studies determines that a student is not eligible for advancement, the department and the student will be notified of the reasons for the application's deferral. Some reasons for deferring an application include: grade point average below 3.0, outstanding "I" grades in required courses, or insufficient units.

8) Comprehensive Examination and/or Thesis Requirements:

a) Thesis Requirements (Plan I):

Thesis committee meetings: The candidate and major professor should meet at least once a year with the other members of the thesis committee to discuss progress and any changes in research objectives.

Thesis: Research for the Master's thesis is to be carried out under the supervision of a faculty member of the program and must represent a contribution to knowledge in the field. The thesis research must be conducted while the student is enrolled in the program. The thesis is submitted to the thesis committee. The thesis committee will have at most one month to suggest requested revisions. All committee members must approve the thesis and sign the title page before the thesis is submitted to Graduate Studies for final approval. Should the committee determine that the thesis is unacceptable, even with substantial revisions, the program may recommend the student for disqualification from the program to the Dean of Graduate Studies.

The thesis must be filed in a quarter in which the student is registered or on filing fee. Instructions on preparation of the thesis and a schedule of dates for filing the thesis in final form are available on the Graduate Studies web site; dates are also printed in the UC Davis General Catalog and in the Class Schedule and Registration Guide issued each quarter. A student must have a GPA of 3.0 for the M.S. degree to be awarded.

Exit seminar: an exit seminar is required.

b) Comprehensive Examination (Plan II):

Written examination: Students are expected to take the written examination at the beginning of their 5th quarter. Students must pass the background coursework requirements in order to be eligible to sit for the examination.

The written examination will be a written, closed-book examination administered across two consecutive days for a three hour period each day. The format will be a "bluebook" essay-type exam of at least 14 multipart questions on topics derived from the VEN background and depth curriculum subjects. Students must choose 12 questions to answer (i.e. 6 each day). The student's answers to all the examination questions will be graded by the Written Examination Committee. Each question will be graded in a P/NP fashion and students with an aggregate score of 70% (i.e. 8 Passes of at least 12 graded questions) will have passed the exam.

In cases where the student fails the Plan II written exam, there will be a single oral exam the following quarter (expected Spring of Year 2, 6th quarter) administered per UC Davis Division rules, with 3 group faculty present. The scope of the oral exam is the candidate's coursework. Students must be registered or in current filing fee status when taking this oral examination. The examination committee must vote unanimously to pass a student. A student who does not pass this second exam is subject to disqualification from further graduate work in the program.

Literature review and presentation: Following completion of the written examination, students will complete a written literature review and make a presentation on their review topic. The Chair will approve topics and approve a faculty mentor for the written review. Students will complete these requirements by taking one unit of VEN 298 with the Chair and one unit of VEN 298 with the faculty mentor for each of the two quarters of Winter and Spring of the second year. The faculty mentor will certify completion of the written requirement, and the Chair will certify completion of the oral requirement.

Once all requirements have been completed, the Master's Report Form is signed by the Chair and then forwarded to the Office of Graduate Studies. The deadlines for completing this requirement are listed on the Graduate Studies web site; dates are also printed in the UC Davis General Catalog and in the Class Schedule and Registration Guide issued each quarter. A

candidate must be a registered student or in Filing Fee status at the time the program submits the form, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The program must file the report with Graduate Studies within one week of the end of the quarter in which the student's degree will be conferred.

9) Normative Time to Degree:

The Normative Time to Degree for the M.S. program in Viticulture & Enology is six quarters.

10) Typical Time Line and Sequence of Events:

Possible Plan I Academic Schedule

VEN Course Number (Units)			
YEAR 1	Fall	Winter	Spring
	VEN 101A (3)	VEN 101B (3)	VEN 101C (3)
	VEN 123 (2)	VEN 126 (3)	VEN 125 (2)
	VEN 123L (2)	VEN 126L (2)	VEN 125L (2)
	VEN 124 (2)	VEN 128 (2)	VEN 135 (4)
	VEN 124L (3)	VEN 128L (2)	VEN 290 (1)
	VEN 290 (1)	<i>(Indicate Plan I selection and Major Professor)</i>	
Total Units	13	15	12
YEAR 2	Fall	Winter	Spring
	VEN 215 (3) (alt)	VEN 110 (3)	VEN 140 (3) (alt)
	VEN 216 (4) (alt)	VEN 217 (4) (alt)	VEN 210 (4) (alt)
	VEN 299 (1-12)	VEN 219 (3)	VEN 213 (3) (alt)
		VEN 235 (4) (alt)	VEN 224 (3)
		VEN 299 (1-12)	VEN 225 (3)
			VEN 290 (1)
			VEN 291 (2) (alt)
		<i>(File for candidacy)</i>	VEN 299 (1-12)
			<i>(Exit seminar, submit thesis)</i>
Total Units	12	12	12

Possible Plan II Academic Schedule

VEN Course Number (Units)			
YEAR 1	Fall	Winter	Spring
	VEN 101A (3)	VEN 101B (3)	VEN 101C (3)
	VEN 123 (2)	VEN 126 (3)	VEN 125 (2)
	VEN 123L (2)	VEN 126L (2)	VEN 125L (2)
	VEN 124 (2)	VEN 128 (2)	VEN 135 (4)
	VEN 124L (3)	VEN 128L (2)	VEN 290 (1)
	VEN 290 (1)	<i>(Indicate Plan II selection and find internship host—discuss with Advisor)</i>	
		<i>(File for In Absentia for Fall)</i>	
Total Units	13	16	14
YEAR 2	Fall	Winter	Spring
	VEN 292 (12)	VEN 110 (3)	VEN 140 (3) (alt)
		VEN 217 (4) (alt)	VEN 210 (4) (alt)
		VEN 219 (3)	VEN 213 (3) (alt)
		VEN 235 (4) (alt)	VEN 224 (3)
		VEN 298 (2)	VEN 225 (3)
		ARE 121 (4)	VEN 290 (1)
	<i>(In Absentia status)</i>	<i>(File for Candidacy)</i>	VEN 291 (2) (alt)
	<i>(submit internship report)</i>	<i>(Written Exam)</i>	VEN 298 (2)
			ARE 136 (4)
			<i>(Submit review, make presentation)</i>
Total Units	12	12	12

11) Sources of funding

Students in the Viticulture & Enology Master's program are not guaranteed funding. Beyond Graduate Studies graduate group fellowship awards, departmental scholarships, and Jastro Shields research awards, students may be funded as either Graduate Student Researchers (GSRs) or Teaching Assistantships (TAs), typically for the VEN classes. TAs in other departments are also a source of funding.

12) PELP, In Absentia and Filing Fee status.

Information about PELP (Planned Educational Leave), In Absentia, and Filing Fee status can be found in the Graduate Student Guide:

<http://www.gradstudies.ucdavis.edu/publications/>