

VITICULTURE AND ENOLOGY M.S. DEGREE REQUIREMENTS

Revised: December 2006

Graduate Council Approval: June 16, 2011

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. The decision to recommend admission to the Dean of Graduate Studies will be made by the VEN Grad Group Admissions Committee on the basis of available space and the competitiveness of applicants compared to the eligible pool.

a) Prerequisites:

| 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, 16B or 21A, 21B) | 6-8 |
| Biochemistry (BIS 102, 103, or 105) | 3-6 |
| Microbiology (MIC 102, 102L, or MIC 101) | 4-7 |
| Plant Sciences (PLS 2) | 3 |
| Statistics (STA 106, or PLS 120) | 4 |
| TOTAL | 53-61 |

b) Deficiencies:

Course work deficiencies should 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)

Plan I. This plan requires 49 units of graduate and upper division courses (the 100 and 200 series only) and, in addition, a thesis or a project in lieu of a thesis. At least 27 of the 49 units must be VEN 299 research credits.

Plan II. This plan requires 36 units of graduate and upper division courses, of which at least 20 units must be graduate courses in the major field. A research-based internship is required. A comprehensive final examination in the major subject is required of each candidate. No thesis is required.

3) Course Requirements (Plan I: 49 units*; Plan II: 36 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 can not acquire these background coursework prior to admission to our program.***

- VEN101A. Viticultural Practices (3 units)
- VEN101B. Viticultural Practices (3 units)
- 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)

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)

Plan II Degree: Additional background coursework required

- ARE 100A. Intermediate Microeconomics: Theory of Production and Consumption (4 units)

b) Required Courses (Plan I: 39 units; Plan II: 30 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 298. Group study (2 units)
- VEN 299. Research (27 units minimum required)

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.*
- VEN 298. Group study (2 units)

- Agricultural and Resource Economics Upper Division or Graduate Level coursework (6 units minimum required), chosen in consultation with Graduate Advisor.

c) Elective Courses (Plan I: 10 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 49 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 36 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:

There are no special requirements.

5) Committees:

a) Executive Committee

The Executive Committee is comprised of five members: the Group Chair, 3 elected members, and one student representative. The Chair is a non-voting member of the Executive Committee, but is able to cast a vote in the event of a tie. The student representative is a non-voting participant of the Executive Committee.

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

b) Committee on Educational Policy

The Committee on Educational Policy shall consist of the members of the Executive Committee and the graduate advisers. The Executive Committee shall annually select one of its members to serve as chair of the Committee on Educational Policy. All members of the Committee on Educational Policy, including the Chair of the Committee, can vote on Committee business; a majority vote is required for approval of Committee actions.

*This committee shall consider, define, and recommend policy on placement examinations, course work requirements, courses offered by the Group, special seminars, and other matters relating to the education program of the Group. The Committee on Educational Policy will **oversee the Plan II comprehensive written exam**. This will include assembly of exam questions, execution of the exam and grading of exam questions.*

c) Committee on Admissions

The Committee on Admissions shall consist of at least two Committee members and one Admissions Committee Chair who are appointed by the Executive Committee from the membership of the Group. All members of the Committee on Admissions (including the Committee Chair) can vote on Committee business; a majority vote is required for approval of Committee actions.

The functions of this committee shall include recommendations to the Office of Graduate Studies for admission of students to the Group, assistance in securing financial support for the students, and recruitment policy.

d) Thesis Committee (Plan I)

The Thesis Committee consists of 3 faculty members from the group nominated by the student (in consultation with the graduate advisor) and appointed by Graduate Studies. Students should nominate their committee when they advance to candidacy.

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 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 guidance committee (Plan I) or for Plan II students, the written, and if necessary, oral exam taken.

The **Mentoring Guidelines** can be found in the Graduate Studies graduate student handbook and on the Viticulture & Enology Department web site under Academics; Graduate Program.

<http://wineserver.ucdavis.edu/content.php?category=Graduate%20Program>

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 at the end of their 4th quarter. The Candidacy for the Degree of Master form 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 a copy to: the appropriate graduate staff person and the student; the Thesis Committee Chair will also receive a copy. 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 an original 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 at least one month before the student plans to make 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.

b) **Comprehensive Examination (Plan II):**

Students are expected to take the comprehensive examination at the end of their 5th quarter. The comprehensive examination will be a written, closed-book examination covering the following topics administered across two consecutive days for a three-hour period each day. The format will be a "bluebook" essay-type exam of at least 12 comprehensive (i.e. multipart) questions on topics derived from the VEN background and depth curriculum subjects. Students must choose 10 questions to answer (i.e. 5 each day). The student's answers to all the examination questions will be graded by the Committee on Educational Policy members (acting as the Comprehensive Exam Committee). Each question will be graded in a P/NP fashion and students with an aggregate score of 70% (i.e. 7 Passes of at least 10 graded questions) will have passed the exam.

In cases where the student fails the Plan II written comprehensive exam, there will be a single comprehensive oral exam the following quarter (expected Spring of Yr 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 as well as the internship project work. 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

Once passed, the Master's Report Form is signed by the Program Graduate Advisor 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 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 298 (2) |
| | VEN 101A (3) | | VEN 101B (3) | VEN 224 (3) |
| | <u>VEN 290 (1)</u> | | <u>VEN 110 (3)</u> | <u>VEN 290 (1)</u> |
| Total Units | 13 | | 15 | 14 |
| YEAR 2 | Fall | | Winter | Spring |
| | VEN 215 (3) (alt) | | VEN 219 (3) | VEN 140 (3) (alt) |
| | VEN 216 (4) (alt) | | VEN 235 (4) (alt) | VEN 291 (2) (alt) |
| | VEN 290 (1) | | VEN 299 (1-12) | VEN 210 (4) (alt) |
| | <u>VEN 299 (1-12)</u> | | <u>VEN 217 (4) (alt)</u> | VEN 213 (3) (alt) |
| | <i>(File candidacy form in Dec.)</i> | | | VEN 225 (3) |
| | | | | VEN 290 (1) |
| | | | | <u>VEN 299 (1-12)</u> |
| Total Units | 12 | | 12 | 12 |

Possible Plan II Academic Schedule

| VEN Course Number (Units) | | | |
|---------------------------|---------------------|--------------------------------------|--------------------|
| YEAR 1 | Fall | Winter | Spring |
| | VEN 123 (2) | VEN 126 (3) | VEN 125 (2) |
| | VEN123L (2) | VEN 126L (2) | VEN 125L (2) |
| | VEN 124 (2) | VEN 128 (2) | VEN 135 (4) |
| | VEN 124L (3) | VEN 128L (2) | VEN 190X (1) |
| | VEN 101A (3) | VEN 101B (3) | VEN 101C (3) |
| | <u>VEN 290 (1)</u> | <u>ARE 100A (4)</u> | <u>VEN 290 (1)</u> |
| Total Units | 13 | 16 | 14 |
| | | | |
| YEAR 2 | Fall | Winter | Spring |
| | <u>VEN 292 (12)</u> | VEN 110 (3) | VEN 140 (3) (alt) |
| | | VEN 219 (3) | VEN 291 (2) (alt) |
| | | VEN 235 (4) (alt) | VEN 213 (3) (alt) |
| | | VEN 217 (4) (alt) | VEN 210 (4) (alt) |
| | | <u>ARE 157 (4)</u> | VEN 224 (3) |
| | | <i>(File Candidacy form in Jan.)</i> | VEN 290 (1) |
| | | | <u>ARE 155 (4)</u> |
| Total Units | 12 | 12 | 12 |

11) Sources of funding

Beyond Graduate Studies department fellowship awards, scholarships and Jastro Shields awards, students are funded as either GSRs or TAs—the latter typically for the VEN classes.

12) PELP, In Absentia and Filing Fee status.

Information about PELP (Planned Educational Leave), In Absentia (reduced fees when researching out of state), and Filing Fee status can be found in the Graduate Student Guide: <http://www.gradstudies.ucdavis.edu/publications/>