A. Master’s of Science Degree Requirements

1) Admissions requirements:

Consideration for program admission requires a bachelor’s degree, three letters of recommendation, official transcripts, GRE scores, and submission of an official, paid online application by the stated admissions deadline. International applicants who have not studied at an English speaking University, must submit TOEFL or IELTS scores, and must meet the Office of Graduate Studies minimum score requirement.

A minimum GPA of 3.0 is required. Admissions decisions are made on a case-by-case basis. Meeting some or all of the admissions criteria does not guarantee admission, but merely eligibility. Once an applicant is determined by the Horticulture & Agronomy Admissions Committee to be eligible for admission, a GGHA faculty member must confirm that they accept the student into their laboratory before a recommendation for admission can be submitted to the Dean of Graduate Studies.

a) Prerequisites:

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

<table>
<thead>
<tr>
<th>Subject</th>
<th>UC Davis Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>General chemistry</td>
<td>CHE 2A and 2B</td>
</tr>
<tr>
<td>Organic chemistry</td>
<td>CHE 8A and 8B</td>
</tr>
<tr>
<td>General biology</td>
<td>BIS 1A, 1B, and 1C; or BIS 2A, 2B, and 2C/PLS 2</td>
</tr>
<tr>
<td>Physics</td>
<td>PHY 1A and 1B</td>
</tr>
<tr>
<td>Statistics</td>
<td>PLS 120 (recommended) or STA 13 or STA 100</td>
</tr>
<tr>
<td>Genetics</td>
<td>BIS 101 or PLS 152</td>
</tr>
<tr>
<td>Plant physiology</td>
<td>PLB 111 or 112 or PLS 100A or ENH 102</td>
</tr>
<tr>
<td>Soils Science</td>
<td>SSC 100</td>
</tr>
</tbody>
</table>

b) Deficiencies:

Applicants who are offered admission with missing entrance requirements will be notified prior to matriculation. Once enrolled in the program, students will be required to complete missing entrance requirements in the first year of residence in the program. Units earned for these missing prerequisites will not be included in the 30 or 36 units required for Plan I and Plan II, respectively. First year students will meet with their Graduate Adviser to determine how the missing entrance requirements will be completed.
2) Master of Science Plan I (Thesis) and Plan II (Comprehensive Examination)

**Plan I** requires that the student complete at least 30 units of course work. Course work may include a combination of upper division undergraduate and graduate level courses, but must include at least 12 units from graduate courses in the major field. All course work must be approved by the student’s Graduate Adviser. The student must submit a thesis based on experimental research, signed by all three members of his/her thesis committee.

**Plan II** requires that the student complete at least 36 units of graduate and upper division courses, of which at least 18 units must be graduate courses in the major field. The student must complete at least 6 units of research (299 or equivalent), but no more than 9 units of research may be used to satisfy the 18-unit requirement. All course work must be approved by the student’s Graduate Adviser. A comprehensive final examination in the major subject is required of each candidate. No thesis is required.

3) Course Requirements – MS Plans I (30 units) and II (36 units)

**a) Core Courses (15-16 units)**

- HRT 200A Horticulture & Agronomy: Principles (4 units)
- HRT 200B Horticulture & Agronomy: Practices (4 units)
- HRT 203 Research Perspectives in Horticulture (3 units)
- HRT 290 Seminar (1 unit)

One course to broaden the student’s background in ecology, selected in consultation with their Graduate Adviser, generally from the following:

- ECL 216 Ecology and Agriculture (3 units)
- PBI 210 Plant Ecophysiology (3 units)
- PLB 117 Plant Ecology (4 units)
- PLB 147 Plant Communities of California (4 units)
- PLS 150 Agroecosystem Management (4 units)
- PLS 162 Urban Ecology (3 units)
- PLS 163 Ecosystem and Landscape Ecology (4 units)

**b) Recommended for students planning to pursue a research-related career,**

one course on research methods and analysis, generally from the following:

- PLS 205 Experimental Design and Analysis (5 units)
- PLS 206 Multivariate Systems and Modeling (4 units)
- ECL 206 Concepts and Methods in Plant Community Ecology (4 units)
c) **Graduate Seminars:** Three additional seminars, including at least one seminar outside the student’s area of specialization

d) **Courses for the Specialization:**
   In addition to the core courses and seminars, students must complete courses for their specialization. These courses are selected with the approval of the student’s Graduate Adviser and Major Professor, and must include at least one graduate level course. See the Suggested Courses List (Appendix B) for examples of courses that might be used to satisfy course requirements for the specialization.

e) **Summary :**
   Plan I students must complete 30 units and Plan II students must complete 36 units; 15-16 units are in the core coursework and the rest are selected in consultation with the Graduate Adviser and Major Professor. 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 research units (299) and perhaps seminars. Per UC regulations, students cannot enroll in more than 12 units of graduate level coursework (200) or more than 16 units of combined upper division and graduate level coursework (100, 200, 300) per quarter.

4) **Special requirements:** N/A

5) **Committees:**
   a) **Admission Committee:**
      Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee is appointed by the Executive Committee, and consists of faculty selected to represent the graduate group’s main areas of emphasis, and a student representative from the Horticulture & Agronomy Graduate Student Association. Based on a review of the entire application, preliminary admissibility is determined. Eligible applicants are then notified that they must find a GGHA faculty member willing to serve as their Major Professor, if one has not already been identified. GGHA faculty are also notified regarding eligible applicants. Once a Major Professor is confirmed for an applicant, an official admissions recommendation is forwarded to the Dean of Graduate Studies for final approval. Notification of admissions decisions will be sent by Graduate Studies. The GGHA will also send successful applicants information regarding their Major Professor and Graduate Adviser.

   b) **Guidance Committee:**
      The Guidance Committee (GC) for a MS Plan I student consists of the Major Professor and the Graduate Adviser most closely associated with the student’s area of specialization. The Plan I GC will work with the student to develop a study plan (Appendix C) that will cover all the course and unit requirements. They will also work with the student on thesis development and selection of a thesis committee.
MS Plan II students work with their Graduate Adviser to develop a study plan that will cover all the course and unit requirements. The Graduate Adviser will also work with the student to select the topics and committee members for the MS comprehensive examination.

Students are required to complete the study plan no later than the end of their second quarter of residence in the program, although they are encouraged to consult with their Guidance Committee/Graduate Adviser prior to registering for their first and second quarter’s classes.

c) **MS Plan I: Thesis Committee:**

The thesis committee will consist of the Major Professor and two other faculty members. The Major Professor serves as Chair of the committee. The thesis committee will guide the student in the design and completion of the proposed research project appropriate for the Master’s level.

The thesis committee will be approved by the GGHA Graduate Adviser and the Dean of Graduate Studies when the student files for advancement to candidacy. The thesis committee will conform to the Graduate Council guidelines. External Committee members are allowed with the approval of the GGHA Graduate Adviser and the Dean of Graduate Studies. Students must complete the approval process set by the Graduate Council for external committee members.

d) **MS Plan II: Comprehensive Examination Committee:**

MS Plan II students must Advance to Candidacy before they are allowed to take the examination for degree. An MS Plan II student may advance to candidacy when approximately one half of the coursework has been completed, and at least one quarter before completion of all degree requirements. The student must have an overall minimum GPA of 3.0 at the time of the examination. Designation of the MS exam committee is not required by the Office of Graduate Studies. Three examiners are nominated by the student, with assistance from his/her Graduate Adviser. Final approval of examination topics and committee members rests with the Chair of the Graduate Group in Horticulture & Agronomy. Students must submit the Comprehensive Exam Committee Approval Form to the GGHA office no later than 60 days prior to the proposed date of the exam. The MS examination committee will conform to Graduate Council guidelines. External Committee members are allowed with the approval of the Graduate Adviser and the Graduate Group Chair.

6) **Advising Structure and Mentoring:**

**GGHA Chair:** Monitors student progress, student support, programmatic advising and mentoring. The Chair is nominated by GGHA faculty, elected by the faculty, nominated by the Dean of Graduate Studies and approved by the Chancellor.

**Graduate Advisor:** Appointed by Graduate Studies and assigned to the student by the graduate group; resource for information on academic requirements, policies and procedures, and registration information, either alone (Plan II students) or as part of a Guidance Committee (Plan I students). The GGHA Graduate Advisers also assist applicants with identifying potential Major Professors.

**Major Professor:** Faculty member who supervises the student’s research and thesis; this person serves as Chair of the Thesis Committee. Generally has primary responsibility for student funding – both for personal and research support. The MP
is the primary mentor for specific graduate students. Faculty mentors should follow and adhere to the Graduate Council Mentorship Guidelines and the Principles of Community.

**Graduate Program Staff:** Student advising for admissions, fellowships/student support, guidance procedures, committee composition and student progress as it relates to completion of graduate degrees (time to degree); serves the faculty and students in the GGHA.

The Graduate Adviser, Graduate Program Staff, or others affiliated with the GGHA, may refer students with unusual or difficult needs to specialized campus resources when necessary or appropriate.

7) **Advancement to Candidacy:**

MS students 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; this is typically early in the fifth quarter. The Candidacy for the Degree of Master form can be found online at: [http://www.gradstudies.ucdavis.edu/forms/](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 he/she has advanced to candidacy, the Graduate Adviser must recommend these changes to Graduate Studies. Students must have their Graduate Adviser and Thesis Committee Chair (if applicable) 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 applicable. If the Office of Graduate Studies determines that a student is not eligible for advancement, the GGHA and the student will be told 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) **Thesis and Comprehensive Examination Requirements:**

**a) Thesis Requirements (Plan I):**

- **Thesis committee meetings:** The student 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. 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; two months is recommended. 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 status; typically the 6-8th quarter. Instructions on preparation of the thesis and a schedule of dates for filing the thesis in final form are available from Graduate Studies; the 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):**

Fulfillment of the Comprehensive Examination is the last requirement of the M.S. Plan II. A student may take the comprehensive examination once they have advanced to candidacy. However, it is important that the comprehensive examination be completed at or near the end of the coursework for the Master's degree; for most students, the exam is taken during the 6th quarter, or in the summer following the 6th quarter.

The comprehensive examination requirement includes both the submission of a brief project report to the comprehensive examination committee and passing an oral exam administered by that same committee. The project report is to be written under the direction of a faculty mentor, who must be a member of the graduate program.

The examination is normally about two hours in length and closed to visitors, except by permission of the Chair of the examining committee. The faculty serving on the examination are expected to determine the quality of the performance of the candidate on all parts of the examination and not solely for the section covered by the examiner. Graduate Council has stipulated that, on the first attempt, the performance of any candidate irrespective of degree objective can be evaluated as: 1) a pass; 2) a not pass; or, 3) a fail.

The scope of the oral exam is the candidate's coursework, as well as the project work. The Exam committee’s unanimous vote is required to pass a student on the exam. If a student does not pass the exam, the committee may recommend that the student be reexamined one more time, but only if the Graduate Adviser concurs with the committee. The second exam must take place within one quarter of the first exam. The format of the second exam is the same as that of the first exam and may include the submission of an amended version of the report. The examination may not be repeated more than once. A student who does not pass on the second attempt is subject to disqualification from further graduate work in the program.

Once passed, the Master's Report Form is signed by the Program Graduate Adviser and then forwarded to the Office of Graduate Studies. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or on 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:**
   Advancement to Candidacy: 5th quarter
   Completion of Degree: 6th quarter (Plan II); 7th-8th quarter (Plan I)

10) **Typical Time Line and Sequence of Events:**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Submit study plan</td>
<td>Meet with thesis committee</td>
</tr>
<tr>
<td></td>
<td>SSC 100 (missing prerequisite class)</td>
<td>Specialization course</td>
<td>Specialization course</td>
</tr>
<tr>
<td></td>
<td>PLS 290 - Seminar</td>
<td></td>
<td>ENT 297 - Seminar</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
</table>
|        |      | Advance to candidacy | -Plan II, Comprehensive Exam completed  
|        | ECL 216 - Ecology and Agriculture | PLS 205 - Experimental Design and Analysis | Specialization course |
|        | Specialization course | PLP 290 - Seminar | HRT 290 - Seminar |

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall or Winter</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plan I, submit thesis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Course work deficiencies at admission may delay student progress, but seldom by more than a quarter.

11) **Sources of funding:**
   Funding sources available to GGHA students, over which the GGHA has control, include work study and block grant fellowship support. The GGHA does not control any GSR or TA funding. Students should consult with individual faculty regarding research funding available to fund GSR appointments, as this is how most of our students are funded. Students should consult the GGHA website for links to TA listings and external fellowship funding.

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/](http://www.gradstudies.ucdavis.edu/publications/)
B. PhD Degree Requirements

1) Admissions requirements:

Consideration for program admission requires a bachelor’s degree, three letters of recommendation, official transcripts, GRE scores, and submission of an official, paid online application by the stated admissions deadline. International applicants who have not studied at an English speaking University, must submit TOEFL or IELTS scores, and must meet the Office of Graduate Studies minimum score requirement.

A minimum GPA of 3.0 is required. Admissions decisions are made on a case-by-case basis. Meeting some or all of the admissions criteria does not guarantee admission, but merely eligibility. Once an applicant is determined by the Horticulture & Agronomy Admissions Committee to be eligible for admission, a GGHA faculty member must confirm that they accept the student into their laboratory before a recommendation for admission can be submitted to the Dean of Graduate Studies.

a) Prerequisites:

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

- General chemistry: CHE 2A and 2B
- Organic chemistry: CHE 8A and 8B
- General biology: BIS 1A, 1B and 1C; or BIS 2A, 2B, and 2C/PLS 2
- Physics: PHY 1A and 1B
- Statistics: PLS 120 (recommended) or STA 13 or STA 100
- Genetics: BIS 101 or PLS 152
- Plant physiology: PLB 111 or 112 or PLS 100A or ENH 102
- Soils Science: SSC 100

b) Deficiencies:

Applicants who are offered admission with missing entrance requirements will be notified prior to matriculation. Once enrolled in the program, students will be required to complete missing entrance requirements in the first year of residence in the program. First year students will meet with their Guidance Committee to determine how the missing entrance requirements will be completed.

2) Dissertation Plan B

Plan B specifies a three member (minimum) dissertation committee, an optional final oral examination (decided on an individual student basis by the dissertation committee), and an exit seminar for all students.
3) Course Requirements – PhD

a) Core Courses (16-17 units)

HRT 200A Horticulture & Agronomy: Principles (4 units)
HRT 200B Horticulture & Agronomy: Practices (4 units)
HRT 203 Research Perspectives in Horticulture (3 units)
HRT 290 Seminar (1 unit)

One of these two classes:
PLS 205 Experimental Design and Analysis (5 units)
PLS 206 Multivariate Systems and Modeling (4 units)

b) Graduate Seminar: Students must take at least one graduate seminar

c) Qualifying Examination Topic Preparation:
In addition to the core courses and seminar, students must complete courses to prepare for their qualifying exam. The number of courses may vary, but they must take a minimum of three courses, totaling at least 9 units, exclusive of seminar and research units; at least two of these classes (minimum 6 units) should be at the graduate level.

All PhD students will be examined on the topics of general horticulture and agronomy and a cropping system. The remaining three topics, and the courses to prepare the student for examination on those topics, will be selected with the approval of the student’s Guidance Committee (see section 5b). Some suggested topics and courses are shown below. These are examples and not meant to be exhaustive.

Agroecology
ATM 133 Biometeorology
ECL 201 Ecosystem and Landscape Ecology
ECL 216 Ecology and Agriculture
PLS 150 Agroecosystem Management
SSC 208 Soil-Plant Interrelationships

Crop Improvement
GGG 201A Advanced Genetic Analysis
GGG 201B Genomics
GGG 201D Quantitative and Population Genetics
GGG 291 History of Genetics Seminar
PLS 220 Genomics and Biotechnology of Plant Improvement
PLS 221 Genomics and Breeding of Vegetable Crops
PLS 222 Advanced Plant Breeding

Crop Production Systems
ECL 216 Ecology and Agriculture
ENH 125 Greenhouse and Nursery Crop Production
ENH 229 Analysis of Horticultural Problems
HRT 251  Modeling Horticultural Systems  
PLS 110A,L  Principles of Agronomic Crop Production, w/lab  
PLS 110C  Crop Management Systems for Vegetable Production  
VEN 101A-C  Viticultural Practices  
VEN 216  Vineyard Establishment and Development  

Plant Physiology  
PBI 203N  Research Tools in Plant Cell and Molecular Biology  
PBI 210  Plant Ecophysiology  
PBI 212  Physiology of Herbicidal Action  
PLS 100A  Metabolic Processes of Cultivated Plants  
PLS 100B  Growth and Yield of Cultivated Plants  
PLS 100C  Environmental Interactions of Cultivated Plants  
VEN 110  Grapevine Growth and Physiology  

Postharvest Biology/Physiology  
PLS 172  Postharvest Physiology and Technology  
PLS 173  Molecular and Cellular Aspects of Postharvest Biology  
PLS 174  Microbiology and Safety of Fresh Fruits and Vegetables  
PLS 196  Postharvest Technology of Horticultural Crops  
PLS 212  Postharvest Biology of Fruits and Nuts  
PLS 213  Postharvest Physiology of Vegetable Crops  

**d) Summary:**  
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 research units (299) and perhaps seminars. Per UC regulations, students cannot enroll in more than 12 units of graduate level coursework (200) or more than 16 units of combined upper division and graduate level coursework (100,200,300) per quarter.  

**4) Special requirements:**  
N/A  

**5) Committees:**  

a) **Admission Committee:**  
Once the completed application, all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee is appointed by the Executive Committee, and consists of faculty selected to represent the graduate group’s main areas of emphasis, and a student representative from the Horticulture & Agronomy Graduate Student Association. Based on a review of the entire application, preliminary admissibility is determined. Eligible applicants are then notified that they must find a GGHA faculty member willing to serve as their Major Professor, if one has not already been identified. GGHA faculty are also notified regarding eligible applicants. Once a Major Professor is confirmed for an applicant, an official admissions recommendation is forwarded to the Dean of Graduate Studies.
for final approval. Notification of admissions decisions will be sent by Graduate Studies. The GGHA will also send successful applicants information regarding their Major Professor and Graduate Adviser.

b) **Guidance Committee:**

The Guidance Committee for a PhD student consists of the Major Professor, the Graduate Adviser most closely associated with the student’s area of specialization, and a third member of the GGHA, selected by the Graduate Adviser, in consultation with the Major Professor. The Guidance Committee will work with the student to develop a study plan that will cover all the course and unit requirements. This committee will also determine the qualifying examination topics and nominate the qualifying examination committee members. They will also guide the student in the selection of a dissertation committee.

Students are encouraged to consult with their Guidance Committee/Graduate Adviser prior to registering for their first quarter’s classes. They are required to meet with their Guidance Committee during their first, third, and fifth quarters, and submit an updated copy of their Guidance Committee Report (Appendix A) to the Horticulture & Agronomy office after each meeting. The Guidance Committee Report is available on the GGHA website; copies of completed Guidance Committee Reports are available in the students’ drop boxes on the GGHA Advising SmartSite.

c) **Qualifying Examination Committee:**

The student and his/her Guidance Committee will nominate a five person Qualifying Examination Committee, normally as part of the fifth quarter Guidance Committee meeting. Students must provide the Guidance Committee report, which includes the slate of nominees, to the GGHA office no later than 60 days prior to the proposed date of the Qualifying Exam. The nominations, with the approval of the GGHA Graduate Adviser, will be forwarded to the Dean of Graduate Studies for approval. The QE Committee will conform to Graduate Council guidelines, which requires that at least one non-GGHA faculty member serve on the Committee. The Major Professor does not serve on the QE Committee. External Committee members are allowed with the approval of the GGHA Graduate Adviser and the Dean of Graduate Studies. Students must complete the approval process set by the Graduate Council for external committee members. The QE Committee conducts the exam and submits results to the Office of Graduate Studies.

d) **Dissertation Committee:**

Dissertation Committees will be composed of three members, selected by the student in consultation with the Guidance Committee. The role of the Dissertation Committee is to advise the doctoral student on the research topic and methods, and to review and approve the completed dissertation. The Major Professor will serve as Chair. Students are expected to meet with the Chair of their Dissertation Committee regularly; they are also expected to consult with the other members of the committee, although not as frequently. Dissertation Committee members are expected to read and comment on a dissertation within four weeks from its submission.

The majority of the committee should be members of the GGHA. The dissertation committee must be listed on the student’s Candidacy form, which must then be
approved by the student’s Major Professor, the GGHA Graduate Adviser and the Dean of Graduate Studies. The composition of the dissertation committee will conform to Graduate Council guidelines. External Committee members are allowed with the approval of the GGHA Graduate Adviser and the Dean of Graduate Studies. Students must complete the approval process set by the Graduate Council for external committee members.

6) **Advising Structure and Mentoring:**

**GGHA Chair:** Monitors student progress, student support, programmatic advising and mentoring. The Chair is nominated by GGHA faculty, elected by the faculty, nominated by the Dean of Graduate Studies and approved by the Chancellor.

**Graduate Advisor:** Appointed by Graduate Studies and assigned to the student by the graduate group; resource for information on academic requirements, policies and procedures, and registration information; as a member of the student’s Guidance Committee, helps student determine topics and committee members for the Qualifying Exam, and the course work required to prepare for the QE. The GGHA Graduate Advisers also assist applicants with identifying potential Major Professors.

**Major Professor:** Faculty member who supervises the student’s research and thesis; this person serves as Chair of the Dissertation Committee; generally has primary responsibility for student funding – both for personal and research support; as a member of the student’s Guidance Committee, helps student determine topics and committee members for the Qualifying Exam, and the course work required to prepare for the QE. The MP is the primary mentor for specific graduate students. Faculty mentors should follow and adhere to the Graduate Council Mentorship Guidelines and the Principles of Community.

**Third Guidance Committee Member:** As a member of the student’s Guidance Committee, helps student determine topics and committee members for the Qualifying Exam, and the course work required to prepare for the QE.

**Graduate Program Staff:** Student advising for admissions, fellowships/student support, guidance procedures, committee composition and student progress as it relates to completion of graduate degrees (time to degree); serves the faculty and students in the GGHA.

The Graduate Adviser, Graduate Program Staff, or others affiliated with the GGHA, may refer students with unusual or difficult needs to specialized campus resources when necessary or appropriate.

7) **Advancement to Candidacy:**

Before advancing to candidacy for a doctoral degree, a student must have satisfied all requirements set by the graduate program (except the dissertation and exit seminar), must have a minimum GPA of 3.0 in all course work undertaken (except those courses graded S/U), and must have passed a Qualifying Examination before a committee appointed to administer that examination. Normally, students advance no later than the end of the 7th quarter; students must pass their QE and advance to candidacy by the end of the ninth quarter in order to remain eligible for academic appointments (TA, GSR, AI, etc.). The student must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee in order to be officially promoted to PhD Candidacy.
8) Qualifying Examination and Dissertation Requirements:

a) Qualifying Examination:

1. General Information

Students will complete all course requirements before taking their Qualifying Examination. Passing this exam makes the student eligible for advancement to candidacy. The qualifying exam should be taken by the seventh quarter and no later than the end of the ninth quarter after admission to the PhD program.

The primary purpose of the Qualifying Examination (QE) is to validate that the student is academically qualified to conceptualize a research topic, undertake scholarly research and successfully produce the dissertation required for a doctoral degree. The QE must evaluate the student’s command of the field, ensuring that the student has both breadth and depth of knowledge, and must not focus solely on the proposed dissertation research. In addition, the QE provides an opportunity for the committee to provide important guidance to the student regarding his/her chosen research topic.

Once the QE Committee has been approved by the Dean of Graduate Studies, it is the student's responsibility to find an examination date and time suitable for everyone, reserve a room, and send a notice of the exam's location, date, and time to all participants.

The Qualifying Examination will consist of written and oral sections.

2. Written Portion of the Exam – Research Proposal

The written portion of the exam consists of a dissertation research proposal. The proposal should be provided to members of the qualifying examination committee two weeks before the qualifying exam.

The proposal is to be prepared independently, and should be no more than 8 pages. It is to describe the student's dissertation-specific research aims, hypotheses, progress to date, and experimental approach. Concepts within the research proposal can be discussed with others (such as the student's major professor and peers), but the writing of the proposal should be the student's work, as the proposal will serve as evidence of the student's proficiency in scientific writing.

The qualifying exam committee will be responsible for assessing that the student's writing proficiency is satisfactory before advancement to candidacy. Furthermore, the proposal will provide information that may be discussed during the oral exam.

3. Oral Portion of the Exam

The oral portion of the qualifying exam will be approximately three hours in length and is intended to demonstrate the student's critical thinking and ability to synthesize information, and broad knowledge of the field of study.
The examination is closed to visitors, except by permission of the chair of the examining committee. The QE begins with an oral presentation of the student's research proposal, and questioning related to its objectives and methodology. However, the QE is not a proposal defense, and the outcome of the QE should not be determined solely by the quality of the candidate's research proposal.

The committee will evaluate the student's general qualifications for a respected position as an educator or leader, as well as the student's preparation in a specialized area of study based upon relevant portions of the student's previous academic record, performance on the various parts of the examination, and the student's potential for scholarly research. The faculty serving on the examination are expected to determine the quality of the performance of the candidate on all parts of the examination and not solely for the section covered by the examiner.

4. Outcome of the Exam

The committee will reach a decision on the student’s performance immediately after the oral exam. The committee, having reached a unanimous decision, shall inform the student of its decision to:

- “Pass” (no conditions may be appended to this decision),
- “Not Pass” (the Chair’s report should specify whether the student is required to retake all or part of the examination, list any additional requirements, and state the exact timeline for completion of requirements to achieve a “Pass”), or
- “Fail”.

If a unanimous decision takes the form of “Not Pass” or “Fail”, the Chair of the QE committee must include in its report a specific statement, agreed to by all members of the committee, explaining its decision and must inform the student of its decision. Having received a “Not Pass,” the student may attempt the QE one additional time; the QE report must list the specific conditions and timing for the second exam. After a second examination, a vote of “Not Pass” is unacceptable; only “Pass” or “Fail” is recognized. Only one retake of the Qualifying Examination is allowed. Should the student receive a “Fail” on the first or second attempt at the exam, the student will be recommended for disqualification from the program to the Dean of Graduate Studies. The student has the right to appeal the decision.

b) The Dissertation:

1. Exit Seminar

The dissertation follows Plan B with a required exit seminar. Satisfaction of this requirement must be verified by the Dissertation Committee Chair. The Exit Seminar is a formal public presentation of the student's research before the program faculty and students. It is recommended that this presentation take place during the Spring quarter, as part of the HRT 290 seminar. The Dissertation Committee should not sign the Dissertation until after the exit seminar has taken place. Adequate scheduling of the exit seminar is the responsibility of the student.
2. **Dissertation: General Requirements**
   Filing of a Ph.D. dissertation with the Office of Graduate Studies is normally the last requirement satisfied by the candidate. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or in Filing Fee status at the time of filing a dissertation, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The PhD Dissertation will be prepared, submitted and filed according to regulations instituted by the Office of Graduate Studies [http://gradstudies.ucdavis.edu/students/filing.html](http://gradstudies.ucdavis.edu/students/filing.html). Satisfaction of this requirement must be verified by the Dissertation Committee Chair.

3. **Dissertation:**
   A dissertation is based on significant original research in the area of expertise and must result in a document of publishable quality that conforms to GGHA and Graduate Council guidelines. The PhD is awarded upon successful completion of the dissertation, after it is filed with the Office of Graduate Studies.

   Students should meet regularly with their dissertation committee. The dissertation must be submitted to each member of the dissertation committee at least one month before the student expects to make requested revisions; committee members are expected to respond within 4 weeks, not including summer months for nine month faculty. Informing committee members of progress as writing proceeds helps the members to plan to read the dissertation and provide feedback within this time frame.

   The dissertation must be approved and signed by the dissertation committee before it is submitted to Graduate Studies for final approval.

9) **Normative Time to Degree:**
   Normative time for Advancement to Candidacy is 7 quarters.
   Normative time for completion of degree (from admission to completion) is 5 years.

10) **Typical Time Line and Sequence of Events:**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Meet with Guidance Committee; submit GC Report</td>
<td>Meet with Guidance Committee; submit GC Report</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SSC 100 (missing prerequisite class)</td>
<td>Course for QE</td>
<td>Course for QE</td>
</tr>
<tr>
<td></td>
<td>Seminar</td>
<td></td>
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</tbody>
</table>


<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Meet with Guidance Committee; identify QE Committee; submit GC Report; program will submit nominations to Graduate Studies</td>
<td>Once QE Committee is approved by Grad Studies, contact members to schedule QE</td>
</tr>
<tr>
<td></td>
<td>Course for QE</td>
<td>PLS 205 - Experimental Design and Analysis</td>
<td>Course for QE</td>
</tr>
<tr>
<td></td>
<td>Course for QE</td>
<td>Seminar</td>
<td>Course for QE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall (or Summer)</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Take QE; Advance to Candidacy</td>
<td>Research</td>
<td>Research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Research</td>
<td>Research</td>
<td>Research</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 5</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Research</td>
<td>Research</td>
<td>Submit dissertation to committee for review; revise and submit to Graduate Studies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Exit Seminar</td>
</tr>
</tbody>
</table>

*Course work deficiencies at admission may delay student progress, but seldom by more than a quarter.

11) **Sources of funding:**
Funding sources available to GGHA students, over which the GGHA has control, include work study and block grant fellowship support. The GGHA does not control any GSR or TA funding. Students should consult with individual faculty regarding research funding available to fund GSR appointments, as this is how most of our students are funded. Students should consult the GGHA website for links to TA listings and external fellowship funding.

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/](http://www.gradstudies.ucdavis.edu/publications/)

13) **Leaving the Program Prior to Completion of the PhD Requirements:**
Should a student leave the program prior to completing the requirements for the PhD, they may still be eligible to receive the Master’s if they have fulfilled all the requirements (see Master’s requirements). The student should consult with his/her GGHA Graduate Adviser regarding eligibility and with the GGHA Graduate Program Coordinator regarding the paperwork required.