

Handbook for Horticulture Graduate Students

Academic Year 2025-2026



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PREFACE

Welcome to Washington State University (WSU) and the Department of Horticulture, an Academic Unit of the College of Agricultural, Human, and Natural Resource Sciences. As you start Graduate School at WSU, we encourage you to seek out opportunities that broaden your knowledge and network connections that will help you professionally.

The information in this handbook is intended to acquaint you with our department and to inform you of policies and procedures for earning your graduate degree. This is your primary resource for your graduate program requirements. **It is the student's responsibility to refer and utilize this guide throughout the degree program.** Clarity-related questions should be directed to the student's Major Advisor (primary) and Academic Coordinators (secondary). Members of the Horticulture Executive Committee (listed below) can also be engaged. There is also a "Department of Horticulture - Graduate Student Life" document to serve as a "quick guide" but is by no means a replacement for this handbook. Note, **Appendix B** provides a useful checklist and students are encouraged to use this throughout their degree program.

INTRODUCTION

The Department of Horticulture aims to ensure the best graduate education possible, both in the classroom and in your research. The Department is also focused on your professional development during your graduate education.

Policies and procedures regarding graduate education are set at three levels, namely university, college and department. This can make it difficult to find the official policy on a process. The [WSU Catalog](#) and the Graduate School's [Policies and Procedures Manual](#) contain most of the general policies on admission, courses, policies and procedures. The Horticulture Graduate handbook is intended to inform you of departmental policies and procedures that you need to follow in obtaining your graduate degree in Horticulture at WSU.

NON-DISCRIMINATION STATEMENT

WSU prohibits sex discrimination in any education program or activity that it operates compliant with Title IX. Inquiries regarding Title IX and reports of sex discrimination can be directed to the [WSU Title IX Coordinator](#). More information on WSU's policies and procedures to respond to discrimination and harassment are available here: [Nondiscrimination statement](#).

PROFESSIONAL AND ACADEMIC INTEGRITY

The Department of Horticulture is committed to the creation and promotion of an atmosphere of open inquiry and freedom of expression by all members of our community. The department recognizes and adheres to the tenet that integrity in scientific research and academic programs is vital to the advancement of knowledge within the scientific and public community. Integrity in scientific research and academic matters is important for individual conscience and professional development, but also is a collective commitment of the university as set forth in various documents ([Faculty Manual](#), [Standards of Conduct for Students](#), the [Graduate Student Code of Rights and Responsibilities](#), and [Responsible Conduct of Research](#)). Cases of scientific fraud, plagiarism, falsification of data, failure to comply with federal, state or university requirements, inappropriate use of research funds and facilities, and incorrect authorship are examples of lack of integrity that can damage the credibility of research and must be avoided.

WSU has established an executive policy on consensual relationships between faculty and students and between supervisors and subordinates, which states that "faculty or anyone in a supervisory role is prohibited from having supervisory responsibility over a student or subordinate with whom he or she is

currently having a romantic and/or sexual relationship.” If a consensual relationship occurs, the faculty member or supervisor must disclose the relationship to their supervisor, with students disclosing the relationship to the Department Chair. Sanctions will not ordinarily be imposed when developing romantic and sexual relationships are promptly self-reported and measures are taken to remove the conflict of interest, so long as the relationship is not alleged by one of the parties to be nonconsensual or discriminatory. Review BPPM 60.13 [Consensual Romantic or Sexual Relationships Between Faculty, Staff, and/or Students](#) for more information.

GRADUATE PROGRAM ADMINISTRATION

Horticulture Graduate Program Bylaws

The Horticulture Graduate Program is governed by official bylaws, approved by the Graduate Faculty in Horticulture, The Graduate School, and the WSU Faculty Senate. The [Horticulture Graduate Program Bylaws](#) define the administration of the Horticulture Graduate Program, composition of graduate student committees, and participation of Horticulture graduate students in the administration of the Horticulture Graduate Program.

The Horticulture Graduate Program is administered by the Horticulture Graduate Executive Committee, which coordinates and advises the Department Chair on the Horticulture Graduate Program. At the discretion of the Department Chair, a graduate student representative will be appointed to the Executive Committee and other ad hoc committees.

Horticulture Graduate Executive Committee

The Horticulture Graduate Executive Committee is tasked with maintaining the high standard of graduate education in Horticulture at WSU. The Executive Committee consists of six active Horticulture Graduate Faculty. Additionally, Horticulture graduate students can elect one graduate student representative to the committee. The current Executive Committee members are:

Lisa DeVetter, Chair, NWREC-Mt Vernon, 360-848-6124, email: lisa.devetter@wsu.edu

Lee Kalcsits, TFREC-Wenatchee, 509-293-8764, email: lee.kalcsits@wsu.edu

Jacob (Jake) Blauer, Pullman, 509-335-6647, email: jblauer@wsu.edu

Per McCord, IAREC-Prosser, 509-786-9254, email: pmmc@wsu.edu

Tom Collins, WSU Tri-Cities, 509-372-7515, email: tom.collins@wsu.edu

Jacob Meeuwsen, Student Representative, email: jacob.meeuwsen@wsu.edu

The Executive Committee recommends Horticulture graduate policies and curricula to the Horticulture Graduate Faculty and Department Chair, who ensures adherence to them. The Committee reviews the progress of all Horticulture graduate students to attempt to avert disruptions in their progress toward the degree and to ensure the quality of graduate student experiences. The Executive Committee or its Chair is available to meet with graduate students to discuss graduate education – including any potential challenges you might have with your program. A student may discuss problems either with individual members of the Executive Committee, the entire Committee, or file a written report with the Department Chair. If you have questions regarding policies or problems that you wish to discuss with someone other than your advisor, PLEASE feel free to contact the Chair of the Executive Committee or any other member of the Committee.

Other duties/responsibilities of the Executive Committee include: a) screening applications and making recommendations to the Horticulture Graduate Faculty for admission of applicants to the Graduate Program in Horticulture; b) arranging for major advisors for each incoming graduate student; c) making recommendations to the Department Chair for the assignment of Graduate Research Assistants and

Teaching Assistants; d) evaluating the progress of each graduate student annually and making recommendations to the Department Chair for orderly progress of students in the graduate program; and e) serving as a recognized grievance committee to mediate problems that arise in the normal graduate student/major advisor relationship when requested by either party. Implementation of recommendations would proceed after consultation and approval by the Department Chair.

Chair of the Graduate Executive Committee

The Chair of the Graduate Executive Committee's role is to: a) direct the Executive Committee in carrying out its functions, b) serve as a contact person with the Graduate School regarding policies and activities, c) be responsible for an initial orientation meeting with new graduate students to explain the policies and procedures of the Graduate School and the Horticulture Graduate Program, and d) actively recruit prospective students and arrange for initial contacts with Horticulture Graduate Faculty.

Graduate Center and Academic Coordinator

The CAHNRS Graduate Center administers the Horticulture Graduate Program. The Academic Coordinators ([Deb Marsh](#) 509-335-2615, [Lisa Lujan](#), 509-335-9542, [Jill Staab](#), 509-335-0691) are responsible for handling graduate student records, scheduling, and administering certain aspects of the Horticulture Graduate Program, as detailed herein. The Academic Coordinators are available to answer many of your questions regarding the implementation of Graduate School and program policies and procedures.

Student's Major Advisor(s)

Each graduate student is assigned a Major Advisor before being accepted into the Horticulture Graduate Program. The Major Advisor is the student's main contact for information regarding graduate education. The Major Advisor, in consultation with the graduate student, will determine and direct the student's activities while enrolled at WSU. The Major Advisor will serve as the chair (or co-chair) of the graduate student's Faculty Advisory Committee. A description of who can serve as a chair or co-chair of a Horticulture graduate student committee is described in the Horticulture Graduate Program Bylaws.

If a graduate student wishes to change their Major Advisor, it is the student's responsibility to find a new Horticulture Graduate Faculty member willing to take over that role. The student must also consult with the Department Chair regarding this change. When a student needs to change a Major Advisor because the faculty member is leaving WSU, the Executive Committee will work with the student and other faculty to find the best alternative Major Advisor.

Student's Faculty Advisory Committee

The graduate student's Faculty Advisory Committee will be responsible for setting, assessing, and maintaining standards for each student. Requirements set by the Faculty Advisory Committee may be in whatever form they feel is most appropriate and will include courses and independent research. This will allow each student's program to meet their particular needs and interests. It is the ultimate responsibility of the student and the major advisor to form the Faculty Advisory Committee. A bulleted list of graduate student, major advisor, and faculty committee members' responsibilities is shown in Appendix A.

Members of the student's Faculty Advisory Committee are selected by the Major Advisor in consultation with the graduate student, although committee membership is regulated by the Horticulture Graduate Program Bylaws and Graduate School policy (see chapters 7.C. and 8.C. of the Graduate School's Policies and Procedures Manual for policy on Master's and Doctoral committees, respectively). Committee members must be approved by the Department Chair and the Graduate School. Committee members should be selected for their abilities and qualifications to assist the student in completing a

graduate program and preparing for a professional post-graduate career. A student's Faculty Advisory Committee can be changed at any time by completing a [Committee Change](#) form that is approved by the new Faculty Advisory Committee and the Program.

M.S. Student's Faculty Advisory Committee shall consist of a minimum of three committee members, including the Major Advisor as Chair. The student's Major Advisor or co-advisor must be tenured or tenure-track Horticulture Graduate Faculty (see Horticulture Graduate Program Bylaws for a list of tenured or tenure-track Horticulture Graduate Faculty), however, a non-tenure track WSU research, clinical, or affiliate faculty, or USDA-ARS researcher, who are appointed to the Horticulture Graduate Faculty in the Horticulture Graduate Program Bylaws, may co-advise/co-chair the committee. If a graduate committee is chaired by a tenured/tenure-track Affiliate Horticulture Graduate Faculty member, then at least one member of the committee must be a Horticulture Graduate Faculty member tenured or tenure-track in the Horticulture Department.

Overall, the M.S. Faculty Advisory Committee must include at least three WSU faculty members, with current appointments:

1. Two of the members must be graduate program faculty in the Horticulture Department.
2. At least one of these two members must be a tenured/tenure-track faculty.
3. The third member must be WSU faculty but need not be graduate faculty or tenured/tenure track in any program.

Advisory committees may have more than three members; however, all members must meet Graduate School policy and program bylaws. All committee members must hold a degree of comparable level to the degree sought by the graduate student.

Individuals who are not WSU faculty can act as additional advisory committee members. Such external advisory committee members must hold a degree comparable to that sought by the student and have special knowledge that is particularly important to the student's proposed program. Examples of such external advisory committee members would include faculty from another university or individuals from an appropriate government, business, or industry organization. To serve on an advisory committee, such an individual must be nominated by the program chair to the dean of the Graduate School, who makes the final decision. The individual's current curriculum vita must be included with the request.

The graduate student is advised to meet each semester, but not less than once each year, with all Faculty Advisory Committee members, either individually or in a combined committee meeting (as appropriate), to update them of progress on degree-related activities and to receive advice regarding graduate work and input on student research progress.

Ph.D. Student's Faculty Advisory Committee shall consist of a minimum of three committee members including the Major Advisor as Chair. The student's Major Advisor or co-advisor must be tenured or tenure-track Horticulture Graduate Faculty (see Horticulture Graduate Program Bylaws for a list of tenured or tenure-track Horticulture Graduate Faculty), however, a non-tenure track WSU research, clinical, or affiliate faculty, or USDA-ARS researcher, who are appointed to the Horticulture Graduate Faculty in the Horticulture Graduate Program Bylaws, may co-advise/co-chair the committee. If a graduate committee is chaired by a tenured/tenure-track Affiliate Horticulture Graduate Faculty member, then at least one member of the committee must be a Horticulture Graduate Faculty member tenured or tenure-track in the Horticulture Department.

Overall, the Ph.D. Faculty Advisory Committee must include at least three Faculty of the Graduate School members, with current appointments:

1. At least two of these advisory committee members must be tenured/tenure-track faculty and members of the graduate program faculty in the Horticulture Department.
2. The third member can be any member in the Faculty of the Graduate School.

Advisory committees may have more than three members; however, all members must meet Graduate School policy and program bylaws. All committee members must hold a degree of comparable level to the degree sought by the candidate.

Individuals who are not WSU faculty can act as additional advisory committee members. Such external advisory committee members must hold a degree comparable to that sought by the student and have special knowledge that is particularly important to the student's proposed program. Examples of such external advisory committee members would include faculty from another university or individuals from an appropriate government, business, or industry organization. To serve on an advisory committee, such an individual must be nominated by the program chair to the dean of the Graduate School, who makes the final decision. The individual's current curriculum vita must be included with the request.

The graduate student is advised to meet each semester, but not less than once each year, with all Faculty Advisory Committee members, either individually or in a combined committee meeting (as appropriate), to update them of progress on degree-related activities and to receive advice regarding graduate work and input on student research progress.

PROGRAM REQUIREMENTS

Degree Options (General)

The Department offers two horticulture graduate degrees. These degree options are described briefly below. See the sections on "Graduate Program of Study" and "Thesis and Special Problems Research" for more information about each degree option.

Master of Science (M.S.) Degree Option: The M.S. degree program is research-based, involving a formal, major research project, and completion of a thesis. The objectives of this option are to train students in the experimental scientific method and to prepare students for handling research projects after graduation or for entering a doctoral program. Horticulture does not offer a non-thesis M.S. Degree option.

Doctor of Philosophy (Ph.D.) Degree Option: All doctoral candidates must conduct independent research leading to a doctoral dissertation and publication of peer-reviewed research papers, with the objective of making a major contribution to the body of scientific knowledge in horticulture. Students in this degree option are expected to have completed a research-based master's degree or to have research experience prior to enrolling in the doctoral program.

Graduate Minor in Horticulture: Students in other doctoral programs at WSU may obtain a minor in Horticulture. Although not limited to, graduate students in Molecular Plant Sciences (MPS) with a Horticulture major advisor are encouraged to obtain a minor in Horticulture.

For all graduate students majoring in Horticulture, a Graduate Program [Learning Outcomes Assessment](#) plan will be followed.

Direct Ph.D. Studies and By-Pass Options

Students with a B.S. degree applying to Graduate School in the Department of Horticulture are generally considered candidates for the M.S. degree. In some cases, a student may wish to apply directly into a Ph.D. program and forego a M.S. degree. This may be the case for students with adequate research experience and capacity for graduate studies.

Students with a B.S. applying directly to a Ph.D. program need to include additional details in their Statement of Purpose that accompanies their application for the Graduate Executive Committee and prospective advisors to make an informed decision on whether to advance the applicant to a Ph.D. program. The applicant needs to include a description of the research project(s) they were involved in and other important details regarding the objectives of the research, duration they were involved in the research, supervisors, role within the project, lessons learned from the experience, and explicitly why they want to pursue a Ph.D. degree and forego a M.S. degree. Publications and/or conference presentations resulting from the research should also be documented in the application. Applicants should have a GPA of at least 3.25. If they are not a native English speaker, test scores of either TOEFL or IELTS must be submitted.

Students working towards a M.S. in Horticulture may also decide they would rather work directly towards a Ph.D. degree instead of finishing their M.S. This may be appropriate for a given student's career goals and if their project can be expanded into a quality Ph.D. project. This by-pass option is available under certain circumstances and the following steps must be taken. First, the student must submit a written letter (email) to their major advisor expressing their desire to and rationale for transfer to a Ph.D. program. The Graduate Coordinator and the Department Chair need to be included with the request. If the Department Chair approves of the request, the major advisor will convene the student's thesis committee to discuss. To be considered ready for transfer to the Ph.D. program, a student must:

- Demonstrate evidence of significant progress in research during their time as a M.S. student
- Demonstrate strong academic performance in graduate-level courses

The committee will vote on the request after they review and discuss the student's progress and performance in research, coursework, and other professional activities; a 75% approval to proceed must be achieved to be elevated to a request. In situations where there are only three committee members, the vote must be unanimous. The Department Chair must also approve of the recommendation before the student is allowed to transfer to a PhD program. If the student is not granted their request, they will continue with the completion of their M.S. program.

If the student is recommended into the Ph.D. program, the Graduate School should be notified using the **Plan and Degree Level Change** form from the Graduate School. The Johnson Hall Graduate Center will facilitate this at the student's request. The student will also need to file a **Ph.D. program of study**. Note that successful transfer from the M.S. to the Ph.D. program does not eliminate any of the Ph.D. requirements described by the Graduate School or Department of Horticulture Graduate Student Handbook.

Departmental and Professional Service

All graduate students are training for professional positions and are expected to take advantage of opportunities to prepare themselves for all aspects of professional life. In addition to learning about conducting research and taking courses to improve their discipline knowledge, students are expected to:

- interact professionally with local and international members of the academic community, horticultural industries, and the public;
- promote the professional development and growth of other students; and
- contribute to the academic functioning and governance of WSU and other appropriate professional bodies, for example, by providing exemplary service on committees.

Graduate students have a voice in university and department governance, and they are expected to exercise their opportunities to be represented. The Horticulture graduate student body is expected to select student representatives for the following: Horticulture Graduate Executive Committee, departmental

Safety Committee, and representatives to departmental Faculty meetings and the WSU [Graduate and Professional Student Association](#) (GPSA). Other opportunities are also available for interested students.

Review of Graduate Student Progress (Annual Reviews)

Annual reviews are required by the Graduate School. They assist the student in the timely completion of all major degree requirements. Discussions on professional development and the degree program itself are also valuable to have during the annual review. However, the graduate student should not rely upon this review to be reminded of program and Graduate School requirements. **IT IS THE STUDENT'S RESPONSIBILITY TO COMPLY WITH ALL REGULATIONS AND DEADLINES, AS SET FORTH IN THE WSU GRADUATE SCHOOL'S [POLICIES AND PROCEDURES MANUAL](#), AND HEREIN.**

An annual review form will be sent each year in January or February to each graduate student by the Academic Coordinator. It is the responsibility of the student to properly complete the form, with comments and signatures added by themselves and their Major Advisor(s). A curriculum vitae (CV) must also be submitted each year. A designated member of the Graduate Executive Committee (usually the chair) plus one additional alternate reviews each annual review. The chair of the Graduate Executive Committee makes recommendations to the Department Chair regarding students' progress. In cases where progress is not satisfactory or concern is elevated by the Graduate Executive Committee, the Department Chair will provide a notification memorandum to the student, and make recommendations to the student, Major Advisor, or the Graduate School to correct any deficiencies in the student's program to date. If a student's progress is determined to be unacceptable, a copy of the notification memorandum will be sent to the Graduate School. This may result in a follow-up progress review after the Fall semester. If two unacceptable evaluations are received, the student may be dismissed from the Horticulture Graduate Program.

The Graduate School has established academic standards that must be met for continued enrollment in graduate programs at WSU. Among those standards is the requirement to maintain a minimum cumulative and program GPA of 3.0.

FAILURE TO MEET ANNUAL REVIEW PERFORMANCE EXPECTATIONS AND/OR ACADEMIC STANDARDS MAY RESULT IN RESTRICTIONS AGAINST STUDENT REGISTRATION THE FOLLOWING SEMESTER.

Teaching / Outreach / Extension Experience

All WSU Horticulture Graduate students are expected to participate in teaching, Extension, and/or research activities. Realizing that each graduate student's experience will be different, this teaching/Extension experience requirement can be met by completing **one or more** of the following activities during the student's graduate program:

1. Prepare and present **lectures** in person or by distance delivery during an undergraduate or graduate level in course(s) offered at WSU.
2. Conduct **tutorial sessions** for undergraduate students.
3. Assist with the preparation and conduct **laboratory periods** for undergraduate courses.
4. Prepare and present **asynchronous presentations**, each equivalent to a lecture period, for possible use later in departmental programs. Topics and presentation format must be approved by his/her advisor. For example, the student might arrange to have slide presentations electronically recorded or might prepare computer-assisted learning modules.
5. Perform required teaching duties on a **Teaching Assistantship**.

6. Prepare and present **outreach and Extension presentations** to stakeholder groups.
7. Other teaching opportunities as available and agreed upon by the Major Advisor.

It is the responsibility of the student and the Major Advisor to arrange for the teaching / Extension / outreach experience to be completed and to assume the responsibility for certifying that this requirement has been met prior to setting the date for the student's final oral examination. It is the responsibility of the Major Advisor or the instructor of the course or supervisor of the event in which the teaching activities will occur to assist the graduate student with learning and applying appropriate educational techniques in fulfilling this requirement.

Publications

Publishing refereed journal articles is an important part of a graduate degree program and professional development in a student's selected field. Publications should be discussed as soon as possible between the student and their advisor, so expectations are established. Generally, it is recommended a MS student publish 1-2 papers from their thesis and a Ph.D. student publish 2-3 papers from their dissertation. Publications usually pertain to refereed journal articles, but in some cases may be peer-reviewed extension articles (published through WSU Extension publishing, or PNW Extension publishing).

Continuous Enrollment Policy

All full-time graduate students must register for a minimum of 10 credit hours each semester excluding summer, with at least one (1) of those credits being Hort 700 (M.S. students) or Hort 800 (Ph.D. students). Part-time graduate students must register for a minimum of 2 credit hours and a maximum of 9 credit hours each semester, excluding summer. International graduate students with F-1 or J-1 visa status should consult with the [Office of International Students and Scholars](#) for enrollment requirements.

Apart from exceptions for graduate leave for personal reasons or internship leave, all M.S and Ph.D. students (prior to preliminary examination) are required by the Graduate School to be continuously enrolled in a minimum of 2 credits each semester, excluding summer. Doctoral Students who have successfully completed their course work and preliminary exam, and who do not enroll for credit will automatically be placed into Continuous Doctoral Status for not more than three years, or until they register for 2 credits of Hort 800 in the semester they plan for their dissertation defense exam. Doctoral students in Continuous Doctoral Status will be charged a small administrative fee (\$50) and will have limited access to University resources. Graduate students who are not enrolled for a semester (except doctoral candidates in Continuous Doctoral Status) and have not received approval from the Graduate School for graduate leave or internship leave will have to reenroll and pay a \$25 fee. Reenrollment requires departmental approval and is not guaranteed.

See Chapter 5 of the [Graduate School Policies and Procedures Manual](#) for details on these policies.

Exit Survey and Interview

Each graduating student must complete an exit survey and provide a CV upon completion of the Horticulture graduate program. The exit survey will be sent to you by your Academic Coordinator along with your final exam details. Additionally, graduate students are invited to meet with the Department Chair for an exit interview at the completion of their graduate program. The required exit survey and optional interview with the Department Chair provides an opportunity to reflect on their time at WSU and to provide formal feedback and recommendations to the Department regarding the graduate program.

General Degree Checklist

Please note the checklists provided in Appendix B to assist with navigating your degree and timeline.

GRADUATE COURSEWORK

The following recommended courses are meant to reflect a balance between assuring knowledge of horticulture and the Faculty Advisory Committee's discretion to design a program suited to each graduate student's area of specialization. Appropriate academic standards must be achieved in all coursework. Regulations as to minimum GPA in coursework and academic probation are found in the [Graduate School Policies and Procedures Manual](#).

Required Courses: All full-time Horticulture graduate students must enroll in the following courses during their degree program:

- **HORT 508** - Research Orientation and Presentation (2 credits) - Emphasizes development of project proposals and communication of oral presentations, posters, and summaries. Enrolled students will present their research proposals to the department during an Expo coordinated by the instructors. This course should be taken within a student's first year, ideally in the student's second semester. For more detail, see the section below titled "Seminars". *Graded.*
- **HORT 509** - Seminar (1 credit per semester recommended for full-time students with a maximum of 12 credits) – This course provides seminar presentations covering recent scientific developments in the field of horticulture. Full-time students should enroll in this course each academic semester (unless enrolled in Hort 510). Students are not required to take the course if there is a conflict with another course. *S,F grading.*
- **HORT 510** - Graduate Seminar (1 credit for a maximum of 4 credits) – The student delivers their exit seminar during the departmental Hort 509 seminar series. This course is generally taken during the student's final semester. For more detail, see the section below titled "Seminars". *Graded.*
- **HORT 700 (M.S.) or HORT 800 (Ph.D)** - At least one credit of Hort 700 (M.S. students) or Hort 800 (Ph.D. students) every semester the student is enrolled full-time (except summers). Note students must be enrolled with a minimum of 2 credits in the term of prelim and/or final exams. Degree requirements include 4 credits minimum Hort 700, or 20 credits minimum Hort 800.

Recommended Courses

To assure a broad understanding of what constitutes the field of horticulture, it is recommended that all students complete some courses from each of the categories listed below. Note that the listed courses are examples and do not include all courses that could possibly be taken within each of these categories and availability of courses may change. Check the [WSU Catalog](#) for course availability. Students should work closely with their Major Advisor and advisory committee to choose courses that align with their research project and career goals.

Applied Plant Sciences: Pomology (Hort 310), Viticulture (Hort 313), Olericulture (Hort 320), Landscape Plant Installation and Management (Hort 331), Greenhouse Management and Crop Production (Hort 357), Trends in Horticulture (Hort 425), Advanced Viticulture (Hort 513), Post-Harvest Biology and Technology (Hort 518), Fruit Crops Management (Hort 521), Potato Science (PISc 590 at Univ. Idaho), or Advanced Topics in Horticulture (Hort 503).

Basic Plant Sciences: Crop Plant Genetics (Hort 345), Plant Molecular and Cellular Biology (Hort 430), Plant Genomics and Biotechnology (Hort 480), Advanced Horticultural Crop Physiology (Hort 516), Post-Harvest Biology and Technology (Hort 518), Data Analysis in Systems Biology (Hort 522), Chemistry and Biochemistry of Fruit and Wine (Hort 535), Statistical Genomics (Hort 545), Bioinformatics for Research (Hort 550), Systematic Botany (Biol 332), Plant Physiology (Biol 420), Plant Breeding (Crop_Sci 445), Plant Anatomy (Biol 509), Viruses and Virus Diseases of Plants (PIP 511), Molecular Mechanisms of Plant Development (Biol 512), Plant Metabolism (Biol 513), Stress Physiology of Plants (Biol 517), Plant Cell Biology (Biol 537), Insect-Plant Interactions (Ent 549 at

Univ. Idaho), Plant Ecophysiology (Biol 560), Diversity of Plants (Biol 570), or Advanced Topics in Horticulture (Hort 503).

Research Foundation: Courses that contribute to a research foundation (foundational, analytical, methodological, or techniques) include: Molecular Biology I (MBioS 503), Experimental Methods in Plant Physiology (Biol 504), Topics in Computational and Analytical Methods for Scientists (AFS 505), Statistical Methods for Graduate Researchers (AFS 511), General Biochemistry (MBioS 513 & 514), Environmental Biophysics (Soils 514-515), Introduction to Population Genetics (Biol 519), Plant Molecular Genetics (MPS 525), Soil Microbiology (Soil Sci 531), Plant Tissue Culture Techniques (PISc 533 at Univ. Idaho), Soil-Plant-Microbial Interactions (Soil Sci 541), Field Analysis of Sustainable Food Systems (AFS 545), Graduate Student Writing Workshop (Engl 545), Analyzing Microarray and Other Genomic Data (Stat 565), Special Projects in Electron Microscopy (EMic 586), or Advanced Topics in Horticulture (Hort 503).

Supporting Areas: Courses that contribute to an understanding of the agricultural disciplines that directly support undergraduate horticulture degrees: Introductory Soil: A Living System (Soil Sci 201), Introduction to Agroecology (Soil Sci 302), Diseases of Fruit Crops (PIP 300), Organic and Sustainable Agricultural Certifications: From Principles to Practice (SOIL_SCI 303), Ecology and Management of Weeds (Crop Sci 305), Agricultural Entomology (Entom 340), Food Systems in Western Washington (AFS 350), Ecological and Integrated Pest Management (Entom 351), Honey Bee Biology (Entom 361), General Plant Pathology (PIP 429), Soil Fertility (Soil Sci 441), Pesticides and the Environment (IPM 552), Biology and Control of Plant Diseases (PL_P 501), Current Research in Organic and Sustainable Agriculture (AFS 501), Advanced Cropping Systems (Crop Sci 503), Soil Fertility Management (Soil Sci 547).

Fulfilling some or all these recommended categories of coursework may occur before admission into the Horticulture Graduate Program, such as, in an undergraduate program or previous M.S. program. However, prior completion of any of these courses does not preclude the required coursework listed in the student's Graduate Program of Study (see next section). The graduate student's Faculty Advisory Committee will advise the student regarding possible ways to fulfill this coursework.

Soft/Essential Skills: Courses that extend beyond the agricultural sciences but contribute to professional development: Research and Extension Communications in Agriculture (AGRI 587), Management of Organizations (E_M 501), and Project Management (E_M 564). [Tidal Leadership](#) courses may also be of interest to students and should be discussed with their advisor.

Graduate Program of Study

The Graduate [Program of Study](#) is the official Graduate School document that lists the student's research topic, the members of the Faculty Advisory Committee, and all classes that apply towards the graduate degree. The Program of Study may include selected courses from the list of recommended courses above, or other courses that the Major Advisor and Faculty Advisory Committee deem essential. Once approved, it becomes the basis for the requirements of the degree. Note that students can take additional courses, but these require approval by the major advisor and these courses will not be listed on the Program of Study.

The [Program of Study](#) should be completed within the timelines described below. The graduate student, the Major Advisor, and the Faculty Advisory Committee will develop the graduate program to be submitted to the Graduate School. Preparation of the specific Program of Study form for either the M.S. or Ph.D. degree is the responsibility of the student, and the Graduate School's Deadlines and Procedures for Graduation for [M.S.](#) or [Ph.D.](#) should be strictly followed. The student will first submit the completed Program of Study form to the Academic Coordinator for review and approval. Once approved, the graduate student will obtain signatures from the entire Advisory Committee and Horticulture Department

Chair and submit the completed form to the Academic Coordinator who will submit it to the Graduate School for approval. A final approved copy should be maintained on file with the graduate student and their major advisor.

M.S. Program: Students should submit a [Program of Study](#) to the Graduate School before the end of the second semester of graduate work, but no later than the semester before their Final Defense Exam. Students must complete a minimum of 30 hours of credit, including 21 hours of graded coursework, with at least 15 hours at the 500-level including those required courses listed above. Up to 6 hours of graded, non-graduate level coursework at the 300- or 400- level may be included if taken as a graduate student. Courses taken on a pass/fail basis may not be applied to fulfill program requirements. Except for approved extensions, the Graduate School policy is that the maximum time allowed for completion of an M.S. degree is 6 years from the beginning date of the earliest course applied toward the degree.

Ph.D. Program: Students should submit a [Program of Study](#) to the Graduate School by the end of the third semester of graduate work, but no later than the semester before their Preliminary Exam. Students must complete a minimum of 72 hours of credit, including 23 hours of graded coursework, with at least 15 hours at the 500-level level including those required courses listed above. Up to 9 hours of graded, non-graduate coursework at the 300- or 400- level may be included. Courses taken on a pass/fail basis may not be applied to fulfill program requirements. Except for approved extensions, the Graduate School policy is that the maximum time allowed for completion of a doctoral degree is 10 years from the beginning date of the earliest course applied toward the degree, with a 3-year time limit from the semester of completion of the preliminary exam until degree completion.

Transfer Credits

With the approval of a graduate student's Faculty Advisory Committee and the Graduate School, graded graduate-level coursework taken toward a Master's degree at other accredited institutions of higher education, with a grade of B or higher, may be applied to the Doctoral Program of Study in Horticulture at WSU. However, graded graduate-level coursework taken toward a completed Master's degree at other accredited institutions may NOT be used toward a M.S. Horticulture degree at WSU. Graded graduate level course work (with a grade of B or higher) taken as a graduate student, but not taken towards a completed graduate degree, may be used toward a M.S. degree or a Ph.D. degree at WSU with the approval of the student's Faculty Advisory Committee and Department Chair. Students intending to list transfer credits on their Program of Study will need to submit to the Graduate School all official transcripts from colleges or universities showing such credits. In all transfer cases, the number of credit hours that can be transferred and listed on the Program of Study is limited to no more than half of the total graded course credits, excluding the required 1 credit hour of Hort 510 (Graduate Seminar). Transfer credits are subject to the usual time restrictions for M.S. or Ph.D. degrees, that is, credits cannot be more than 6 years-old for a M.S. and 10-years-old for a Ph.D. at the time of graduation. For further details on transfer credits, see the Graduate School's Policies and Procedures Manual (Chapter 6, Section G.2.e.).

Seminars

All Horticulture Graduate students are expected to enroll and attend all Horticulture seminars. The schedule of Horticulture seminars can be found at this link: <https://horticulture.wsu.edu/seminars/>. Both M.S. and Ph.D. candidates are required to present **two seminars** during their Horticulture graduate program. The intent of this requirement is to: 1) provide experience in presenting research seminars and public speaking, 2) encourage prompt consideration and development of a research topic, and 3) inform Horticulture faculty, staff, and graduate students of student research projects.

The first seminar presentation will be a proposal presentation completed as a requirement for HORT 508. This is a required class and presentations will be graded. MS students should present their first seminar/proposal presentation before the end of their second semester at WSU, while Ph.D. students should present before the end of their third semester.

The second seminar presentation, which will be graded and presented as part of Hort 510, will summarize the graduate student's research project results and implications. It should be presented near the time of their final thesis/dissertation defense and can be on the same day but just prior to their final defense exam. Students must schedule this final Hort 510 seminar through the course instructors prior to the start of that semester. Hort 510 seminars are evaluated by all attending faculty, staff, and graduate students.

Students normally register for Hort 510 during the final semester of their graduate program in Horticulture. If they are unable to complete the thesis during the semester in which they have registered for Hort 510, they should still present their seminar as scheduled. Students should not request a grade of Incomplete (I) unless circumstances beyond their control, such as illness, occur. If a student presents a seminar more than a month before their final defense, the student's Major Advisor and Faculty Advisory Committee will determine whether the student should present an additional seminar at the beginning of the defense exam.

Research Proposals

In addition to the Graduate Program of Study, all Horticulture graduate students are required to complete a written research proposal that is thoroughly reviewed by their Faculty Advisory Committee, **prior to the end of their first year of study**. The rationale for writing a research proposal, besides giving students the opportunity to think in depth about their specific research project, is to gain experience in an essential activity of a professional academic or industry career, that is, requesting grant or industry funding for your research ideas, or writing an academic paper that concisely describes your research.

Generally, research proposals should be **8-12 pages in length** (some may be longer) and contain:

- 1) a clear justification for the research project, along with potential short- and long-term impacts
- 2) a literature review of background publications that are relevant to the research project
- 3) a clear statement of the project's objectives and hypothesis(es) that will be tested,
- 4) the experimental design that is intended to accomplish the objectives and test those hypothesis(es),
- 5) the materials and methods that will be used. This includes a discussion of procedures to be followed, an estimate of facilities and equipment that will be needed, and if so required by the Faculty Advisory Committee, an estimate of the time and costs necessary to conduct the research.

All members of the Faculty Advisory Committee should sign and date the cover page of the research proposal to signify approval. An electronic copy of the signed and dated proposal should be provided to all committee members by the student. Every effort should be made to prepare the research proposal so that it can be carried to completion as initially written; however, this document should be viewed as a guide, not a contract, and should be placed within the context of the program's research priorities. Research results and opportunities cannot always be predicted, and students must be prepared to be flexible in terms of committee expectations to get the most from their graduate education. If the research proposal cannot be followed as written, the student's Faculty Advisory Committee may require that the student revise the proposal, but the Department does not require that a new proposal be written.

Expenses

Expenses involved in the conduct of research and availability of equipment should be decided upon at the time of approval of the thesis problem. The Department, through the major advisor, may pay for certain research costs incurred during the course of the student's program.

Research Involving Animal or Human Subjects, Certain Biological Materials, or Radioactive Materials or Machines

All projects involving animal or human subjects, certain biological materials, of radioactive sources must be reviewed and approved by WSU's [Institutional Animal Care and Use Committee \(IACUC\)](#), [Institutional Review Board \(IRB\)](#), [Institutional Biosafety Committee \(IBC\)](#), and [Radiation Safety Committee \(RSC\)](#), respectively, before the research is conducted. For example, if people will taste samples of a product or if people will be asked to fill out a questionnaire or survey, then the project must be reviewed and approved by the IRB before any data are collected. Or, if any recombinant DNA, human fluids or tissues, or other infectious agents related research involving biohazardous materials is anticipated, the prior approval from the IBC is required. For use of radioactive materials and radiation-producing machines, then prior approval by RSC is necessary. The approval process may require a few weeks to a few months, depending on the complexity of the project and the invasiveness of the activities, so plan ahead. For more information on these approval processes, contact the [Office of Research Assurances](#) or the [Radiation Safety Office](#).

MAJOR EXAMS

Ph.D. Preliminary Examination

A preliminary examination is required of doctoral students for advancement to candidacy for their doctoral degree. The preliminary examination is designed to determine the fitness of the student for pursuing a doctoral program in Horticulture. The examination is intended to cover both major and minor disciplines (if a minor is declared). For doctoral students in other graduate programs (e.g. MPS) who are pursuing a Minor in Horticulture, a portion of the preliminary exam will cover horticultural topics.

The preliminary exam should be completed before the end of the second year of graduate work after admission into the Horticulture doctoral program or soon after the majority of course requirements have been fulfilled. In Horticulture, this examination involves both a program-required written examination and a Graduate School-required oral examination, which follows guidelines established by the Graduate School in the [Graduate School Policies and Procedures Manual](#). The student is responsible for scheduling both the written and oral parts of the preliminary examination. The oral exam should be scheduled through the Graduate School using the [Preliminary Examination Scheduling Form](#) or [Interim Examination Scheduling Form for Preliminary Exams](#) (in exceptional circumstances) but only: 1) after the Program of Study has been approved, 2) after all or a substantial portion of the required coursework has been completed, and 3) when the student and their Major Advisor think the student is prepared for the exam. The student must be registered for a minimum of 2 hours of Hort 800 at the beginning of the semester or summer session in which the exam is to be taken and have at least a cumulative 3.0 GPA and a 3.0 GPA or higher on the program courses already taken before the exam may be scheduled.

The written examination, administered by the student's Major Advisor, generally consists of separate examinations from each member of the student's Advisory Committee, including the Major Advisor. The oral examination follows the written portion of the preliminary exam. There is no minimum time requirement between the written and oral portions of the examination, but all aspects of the examination (i.e., the evaluation of any written component, the oral presentation, and/or the balloting meeting) must be completed within 30 calendar days. The examining committee for the oral examination is made up of the student's Faculty Advisory Committee.

Examination questions include, but are not limited to, topics covered in the coursework outlined in the student's Program of Study and coursework prerequisites to the required coursework. Successful completion of the coursework outlined in the Program of Study does not guarantee successful passage of the written or oral examinations. Unsatisfactory performance by a student on the written portion of the preliminary exam will result in postponement of the oral exam.

Procedures for Preliminary Examinations

1. **Student** consults with their Major Advisor and members of their Faculty Advisory Committee to determine dates and times for both the written and oral exams. (Note: Preliminary exams are normally not allowed between semesters or during final exam weeks, except under extenuating circumstances - see next procedure.)
2. **Student** obtains and completes [Preliminary Examination Scheduling Form](#) *(or Interim Examination Scheduling Form for Preliminary Exams—for extenuating circumstances only)* from the Graduate School, obtaining signatures from all members of their Faculty Advisory Committee. The student then submits the completed form to their Academic Coordinator. **(Note: The Program of Study must have approval of the WSU Graduate School prior to scheduling the preliminary exam.)**
3. The **Academic Coordinator** obtains the signature of the Department Chair on the scheduling form, places a copy in the student's file, and sends the completed form to the Graduate School. **(Note: The Preliminary Examination Scheduling Form must be returned to the Graduate School at least 10 working days before the exam begins.)** The Academic Coordinator will also post an electronic copy of the official Announcement of Preliminary Examination (oral exam information only) to all Horticulture faculty via email.
4. The **Major Advisor** requests written questions from each member of the student's Faculty Advisory Committee, indicating the date questions are due back to him/her. **(Note: Allow at least one week for questions to be provided by the Faculty Advisory Committee members.)**
5. **Faculty Advisory Committee** members submit questions with complete examination instructions (see Written Preliminary Exam Options below) to the Major Advisor. The Major Advisor reviews and may discuss the questions with each member of the Faculty Advisory Committee to assure their appropriateness and that there is no duplication.
6. **Major Advisor**, or any designated staff that the Major Advisor wishes to appoint in their place, coordinates scheduling of the written exam with the student, including the venue for the exam.
7. **Major Advisor**, or designated staff member, administers the written questions, one set at a time from each Faculty Advisory Committee member, according to the exam option instructions provided with the questions. The answers to the questions are due back to the Major Advisor or designated staff at the time designated. **(Note: The designated staff member proctoring the exam should return the answers to the Major Advisor.)**
8. **Major Advisor** routes the answers to the appropriate Faculty Advisory Committee member after each set of questions is completed.
9. **Faculty Advisory Committee** members each grade the answers to their questions in a timely manner, but in not more than 5 working days. After grading the answers to their questions as Satisfactory (S) or Unsatisfactory (U), each committee member will return a copy of their evaluation of the answers to the Major Advisor. The Major Advisor will provide an electronic copy of the questions and answers to the Academic Coordinator, who will place them in the student's file.
10. **Major Advisor** discusses the results of the written exam with the student prior to the scheduled oral exam.
 - If the student satisfactorily passes the questions on the written exam from all Faculty Advisory Committee members, he/she may then proceed to the scheduled oral exam.
 - If the student is judged to have performed unsatisfactorily overall on a set of questions from one or more members of the Advisory Committee, the student must cancel their oral

- preliminary exam and prepare for a reexamination. The student will prepare for reexamination on that (those) portion(s) of the written exam in which he/she performed unsatisfactorily. The reexamination must be completed within 90-days of the first written exam. The questions upon which the student is being reexamined should not be identical to the questions that the student performed unsatisfactorily on during the first exam.
- If the student performs satisfactory on the reexamination, then he/she should re-schedule their oral preliminary exam.
 - If the student performs unsatisfactorily on the second written exam, he/she will be either dropped from the Ph.D. program or given the option to continue for an M.S. degree instead.
 - If the initial unsatisfactory written exam and the repeat exam span two semesters, the Major Advisor will give the student an “X” grade for HORT 800 (per WSU Academic Regulation 90j), rather than an “S” grade, in the semester in which the unsatisfactory written exam occurred. Upon successful completion of the repeated written exam, the Major Advisor will convert the “X” grade for HORT 800 to an “S” grade.

Written Preliminary Examination: Options

Each Faculty Advisory Committee member submitting questions for a written preliminary exam will also submit instructions specifying, within each of the following sets of options, the conditions under which the exam should be administered. The number of questions from each committee member is unspecified as long as the complete set of questions submitted by each committee member can reasonably be answered in the specified time. Each Committee member should discuss exam details with the Major Advisor before the exam.

1. Exam Length Options:

- a. Up to 4 hours per examiner, to begin at the beginning of the workday and end by noon or to begin after lunch and end by the end of the workday,
- b. Up to 8 hours per examiner, to begin at the beginning of the workday and end by the end of the workday.

2. Exam Proctoring Options:

The exam may be proctored by the Major Advisor, a designated staff member, or the member of the Faculty Advisory Committee under the following conditions:

- a. The student may bring something to drink and eat to the exam.
- b. If the student needs to leave the room during the exam, all items brought into the room must be left there during the break, and no additional materials may be brought back into the room.
- c. The proctor will notify the student 15 minutes before the end of the exam period. If the student completes the exam before the exam period is over, the student should return the answers immediately to the exam monitor.
- d. No electronic communications devices (i.e. cell phone, tablet or computer with Internet access) should be available to the student, unless designated by the examining faculty member.

3. Exam Recording Options:

- a. Student or the exam proctor provides paper, pencils, pens, and erasers, or
- b. Examiner-approved computer, data storage device, and/or printer.

4. Exam Resources Options:

- a. No resources other than the student's own knowledge (i.e. closed book exam),
- b. Resources, such as books or articles, specifically listed and provided by the examining faculty member,
- c. Unlimited non-human resources (this might include electronic information searches), or
- d. Unlimited human and non-human resources (this might include discussing the questions with other people).

Oral Preliminary Examination

The content and conduct of the oral preliminary examination are the responsibility of the Horticulture Graduate Faculty and should be administered by the student's Major Advisor. The Major Advisor is responsible for conducting a fair and thorough oral exam with an equal opportunity for all members of the student's Faculty Advisory Committee to question the student. The oral preliminary examination should be between 2 and 4 hours in duration (although Graduate School policy states there is no time limit for either the written or oral portions of the exam).

All members of the student's Faculty Advisory Committee must be present at the oral examination, which must be held during regular working hours either on the Pullman or branch campuses, Research and Extension Centers, or by videoconference, if not all members of the Faculty Advisory Committee can be physically present. If held over videoconference, at least one Faculty Advisory Committee member must be physically present with the student. At the conclusion of the oral exam, the student's total performance on the exam should be discussed by the attending Graduate Faculty using the [Preliminary Exam Assessment rubric](#), in which the candidate is evaluated for:

1. Demonstrates comprehensive understanding of the primary literature relevant to the discipline,
2. Demonstrates ability to synthesize knowledge from courses and primary literature, and apply this knowledge to a novel problem or question,
3. Demonstrates ability to apply the principles and technical knowledge of horticultural science and related disciplines to a novel problem or question,
4. Demonstrates a broad understanding of the scientific principles of related disciplines relevant to horticulture, and
5. Demonstrates comprehensive understanding of the scientific problems, principles, and methodologies related horticultural science.

All members of the student's Faculty Advisory Committee must vote to pass or fail. Ballots must be cast considering the entire exam, including both written and oral. Any other members of the Horticulture Graduate Faculty or minor program may be present, ask questions, but may not vote, except with prior permission of the Department Chair of the Horticulture Graduate Program. In any case, faculty wishing to vote must be in attendance during the entire examination and must have participated in the assessment of the student's examination work. If a faculty member who will vote must leave the room or the online session during the examination or balloting discussion, the examination or discussion is to be recessed until said member returns. The student shall pass if a minimum of three-fourths of those voting so indicate (if only 3 voting examiners, 3 passing votes are required to pass). Ballots from WSU faculty, WSU adjuncts, and WSU affiliates are submitted via myWSU – via Graduate Exam tile. External committee members submit their vote via email (emergency ballot not required) to the committee chair and academic coordinator (marshdj@wsu.edu). The chair or coordinator will forward it to gradschool@wsu.edu for processing.

In accordance with Graduate School policy, in the event of a failed oral preliminary examination, the student can be re-examined only one more time. If a student passes their written exams and then fails the oral examination, the student does not need to repeat the written exams. At least 3 months must elapse between a failed oral exam and re-examination. A minimum of 4 months must elapse between the successful completion of the prelim exam and scheduling of a final, thesis defense exam. A member of the Graduate Mentor Academy will be appointed by the Graduate School and must be present for a re-examination. The entire committee must be present and vote. A student who has failed two preliminary examinations may not become a candidate for the doctorate and the student's enrollment in the Graduate School will be terminated. The only exception to this re-examination policy is if a member of the Graduate Mentor Academy (appointed by the Graduate School) presided over the student's first exam and agrees that a re-examination is not an appropriate disposition of the case.

Upon successful completion of the preliminary exam, the candidate should apply for the ["All But Dissertation" \(ABD\) Waiver](#) offered by the Graduate School. This program offers numerous benefits for faculty and students, but most specifically, it encourages the use of extramural grants in support of students seeking their doctoral degrees. Students will be eligible for up to 2 semesters and will be reminded of this opportunity by the Academic Coordinator.

Thesis/Dissertation Defense: Final Oral Examination for M.S. and Ph.D. Students

Passing the final defense examination of the graduate student's thesis/dissertation is the concluding step in the successful completion of the Horticulture Graduate Program. Decisions on the format and content of the thesis/dissertation must be discussed and approved by the student's Faculty Advisory Committee. The student should also work with their Major Advisor to ensure a thoroughly reviewed and revised thesis/dissertation is sent to the Faculty Advisory Committee members for review prior to the defense.

It is important for graduates to prepare, submit, and publish research articles in peer-reviewed journals and peer-reviewed professional publications (e.g. Extension Manuals and Technical Bulletins). To achieve this, thesis/dissertation chapters should be prepared as research manuscripts or professional publications using the style of the journal(s) or publication(s) to which they will be submitted. An introductory chapter, often as literature review, and a final chapter, including conclusions and future research directions from the overall body of research performed by the student, may also be included. Each manuscript contained in the thesis must be internally consistent in form, and the overall format must still comply with the Graduate School's required Dissertation and Thesis Guidelines (format), including the overall title, abstract, signature, and table of contents pages. Some or all of the chapters of the thesis/dissertation should be submitted to the targeted journal or publication for peer review prior to or soon after completion of the graduate degree program. Students should seek guidance at an early stage from their Major Advisor and Faculty Advisory Committee regarding the role of co-authors for chapters developed as manuscripts. Information on authorship determination should be reviewed at [Guidelines for authorship determination for manuscripts](#).

Students should consult with their Major Advisor and Faculty Advisory Committee to determine the specific style acceptable for their dissertation/thesis. The Graduate School does not have an established standard style requirement for the body of the dissertation/thesis. Therefore, the student will use the style manual preferred by their Faculty Advisory Committee. One formatting style must be used for all chapters in the thesis/dissertation. See the Graduate School's detailed [Thesis/ Dissertation Formatting Guidelines](#) for formatting requirements. Formatting requirements pertain to preliminary pages (title, signature, abstract, acknowledgments, table of contents, lists of tables and figures, etc.), margins, and page numbering.

After a successful defense and committee acceptance of the thesis/dissertation, theses and dissertations need to be submitted through ProQuest. No material in the dissertation may be restricted in any way; the dissertation must be made available through the Washington State Libraries and ProQuest for inspection by any interested parties. For example, if a chapter is published as a journal article, copyright permission will need to be obtained from the journal; such permission is generally always provided. Such written permission must be submitted to the Graduate School at final acceptance. See [WSU Graduate School Policies & Procedures Manual](#) for more information.

When approaching the completion of the Horticulture graduate degree program, students should consult the Graduate School's current academic year Deadlines and Procedures for Graduation for [M.S.](#) or [Ph.D.](#) It is the student's responsibility to be aware of the dates of four critical deadlines. These deadlines are set at the beginning of each semester and include:

1. Last date to submit an [Application for Degree](#).
2. Last date to submit a [Final Examination Scheduling Form](#) (or [Interim Examination Scheduling Form for Final Exams](#)—for extenuating circumstances only) (no less than 10 working days prior to the final exam),

3. Last possible date to conduct a final thesis defense exam, and
4. Last date to submit the final thesis or dissertation (within 10 working days after a successful final defense exam).

These deadlines are the student's responsibility and prior approval must be obtained for any extenuating circumstances. Extensions will NOT be given due to poor planning or oversight on the part of the student, i.e., if you miss a deadline it may delay your graduation and increase your expenses.

All M.S. and Ph.D. candidates must defend their thesis or dissertation. This defense usually consists of a seminar prior to the oral defense exam delivered as part of HORT 510. However, a separate public presentation may be arranged outside of HORT 510 (note the student still needs to meet course requirements for HORT 510). All faculty and students in the Horticulture Department are encouraged to attend final seminars. Audience members may be allowed to ask questions, but such questioning should not unduly influence the examination outcome. After the seminar or public presentation, it is acceptable to conclude and conduct the separate final thesis defense oral exam.

The final thesis defense oral exam is restricted to the Faculty Advisory Committee and any other WSU Graduate Faculty. The chair of the student's committee will be appointed by the Graduate School to serve as the Graduate School liaison and will be responsible for the examination process (balloting, etc.). The examination portion of the oral exam should not exceed two-and-one-half hours.

The exam must be held in an academic setting during regular academic sessions (i.e. Fall or Spring semesters, or Summer Session) and working hours either on the Pullman or branch campuses, or Research and Extension Centers. The exam should be transmitted by videoconference to all requesting sites. Zoom arrangements for prelim/final exam will be arranged via the Academic Coordinator, so that the advisor has full host controls for the meeting. The student will include meeting needs on the exam scheduling form. If the exam is held by videoconference, at least one Faculty Advisory Committee members must be physically present with the student.

All members of the committee must be in attendance during the entire examination. If a faculty member wishes to leave the room or the online session during the examination or balloting discussion, the examination or discussion must be recessed until said member returns. When the question-and-answer period is complete, the major advisor will ask the student to leave the room, and the committee will discuss the student's exam performance and cast their vote.

All members of the candidate's Faculty Advisory Committee must vote to pass or fail the student, and any other member the Graduate Faculty in attendance for the entire exam may also vote. The student's thesis defense and accomplishment of learning outcomes will be evaluated and discussed by the attending Graduate Faculty using the [Thesis/Dissertation Defense Examination Assessment rubric](#), by which the graduate student is evaluated:

1. Review the literature in a manner that demonstrates comprehensive knowledge of previous and current research in the field of study,
2. Identification of a viable question within the field of study and posing a worthwhile hypothesis or problem related to the question,
3. Discussion of support for hypothesis or solution to the problem in a manner that effectively documents the contribution of research to the area of study,
4. Design and implementation of appropriate research experiments to test the hypothesis or solve the problem,
5. Appropriate analysis and interpretation of research data,
6. Demonstration of sufficient knowledge of appropriate concepts, theories, and emerging methodologies in horticultural science,

7. Demonstration of qualities for independent, self-motivated research with the ability to recognize problems in the field of study and formulate solution to those problems, and
8. Demonstration of ability to effectively communicate at different levels the results of the research in written, graphic, and verbal modes.

The student will be determined to have passed the exam if the number of affirmative ballots is equal to or greater than the minimum listed in the table below. If the number of ballots exceeds the numbers listed in the table, then a minimum of 75% of the ballots must be affirmative for the student to pass:

Table of Master Final Exam Ballots	
<i>Number of Ballots</i>	<i>Minimum Number of Affirmative Ballots</i>
3	2
4	3
5	4
6	4
7	5
8	6

Table of Doctoral Final Exam Ballots	
<i>Number of Ballots</i>	<i>Minimum Number of Affirmative Ballots</i>
3	3
4	3
5	4
6	5
7	6
8	6

At the exam, each committee member will notify the major advisor of their vote. The major advisor will call the student back into the room and notify him/her of the result.

After the exam, each member of the Faculty Advisory Committee must submit a ballot and an assessment rubric:

1. Final balloting is done electronically via myWSU. WSU faculty navigate to the Graduate Exams tile in myWSU and select the student's name to ballot. It is important that individuals have a device available during the exam to access myWSU. The ballot memo becomes available to the chair after all faculty on the committee have cast their individual ballots in myWSU. NonWSU faculty, or WSU faculty eligible to vote but not on the student's committee, must email their ballot to the committee chair and academic coordinator. The chair/liaison is responsible to ensure the ballots are submitted as soon as possible and no later than 5 business days following the exam.
2. Each member of the Faculty Advisory Committee will complete the [Thesis/Dissertation Defense Examination Assessment rubric](#) after the final exam.

Minimum Timeline for Scheduling the Final Exam

Submit your [Application for Degree](#) early to avoid late fees. Refer to the [Deadlines and Procedures](#) document. The fee is valid for up to one calendar year. You must have an approved Program of Study on file with the Graduate School, and doctoral students must have passed the preliminary exam at least 4 months earlier.

Four weeks or more prior to the thesis defense:

The student must present a **complete draft of the thesis that has been approved by the Major Advisor** to all Faculty Advisory Committee members for review. The student should consult with each committee member to determine their availability to review the draft at the time the student intends to submit it to them. **The student may not be able to complete the next step (i.e. exam scheduling) as planned if Faculty Advisory Committee members have had insufficient time to review and suggest changes to the thesis, and to approve those changes.**

At least 10 working days (i.e., 2 weeks) prior to the dissertation/thesis defense:

A signed copy of the [Final Examination Scheduling Form](#), signed by each of the student's Faculty Advisory Committee members and the Department Chair, must be returned to the Academic Coordinator who obtains the Department Chair's signature and submits the completed form to the Graduate School.

IMPORTANT NOTE: Approval of the Final Exam Scheduling form by the faculty advisory committee indicates that the student has completed - or is expected to complete this semester - all requirements for the degree above, and that this student is enrolled in the required number of 700/800-level credits. Furthermore, the committee verifies that a final thesis/dissertation draft, suitable in content and format for submission to ProQuest and/or the Graduate School, has been given preliminary approval. Any changes requested by the committee and/or Graduate School are mandatory and are the responsibility of the student. Revisions must be made within 10 business days of the examination.

A PDF copy of the thesis/dissertation **must be uploaded to ProQuest** when the *Final Exam Scheduling Form* is due for preliminary approval by the Graduate School of format only, not content. Verification that the student has received approval for use of animal or human subjects in research is required before scheduling the final examination. Include a copy of the ORA approval email with submission of the *Final Exam Scheduling Form*.

At least 5 working days prior to the dissertation/thesis defense:

Copies of the dissertation/thesis must be presented to each member of the student's Faculty Advisory Committee. Additionally, provide a PDF copy to the Academic Coordinator to share with the department (read only, no distribution). The abstract, however, will be extracted and shared with the announcement.

NB: Failure to comply with these deadlines will require re-scheduling the exam, and possibly extra expenses.

Following your successful defense, you have ten (10) business days to submit the following documents as indicated:

- **Upload to myWSU ([instructions](#)):**
 - [Hold Harmless Agreement/Copyright Acknowledgement Form \(pdf\)](#). Note: The Graduate School will serve as the witness.
 - [Survey of Earned Doctorates Completion Certificate \(PhD students only\)](#)
 - [Thesis/Dissertation Approval Form and Upload Instructions \(pdf\)](#) – The committee chair(s) will review/approve this form once they are satisfied with the final version of the thesis/dissertation.
- **Upload to your original ProQuest** submission an electronic copy of your final dissertation (including all changes requested by your committee and the Graduate School), in PDF format.. *When you (the student) create a ProQuest account to submit the draft, you will enter a title into ProQuest. It should match the title on the thesis. When you submit the revised "final" draft into ProQuest after your defense, the title both in ProQuest **and** on the thesis is the official title the thesis will be accepted with. **Again, just please make sure if you change the title on your thesis that you've updated ProQuest as well.***

ACADEMIC STUDENT EMPLOYMENT AND PROCEDURES

WSU/UAW Union Affiliation/Collective Bargaining Agreement

Unless otherwise noted, when employed as a Graduate Research, Teaching or Project Assistant, or a Graduate Summer Research or Teaching Assistant, or a Graduate Summer Work (PAP or hourly), these **WSU academic student employees (ASEs)** are represented and governed by a [collective bargaining agreement](#) as written or amended between Washington State University and the United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW). Please reference this agreement for details on all ASE benefits, including, but not limited to, Vacation, Holidays, and Sick Leave. A copy of the representation for newly hired academic student employees is provided [here](#).

ASE Offer Letter and Job Description

Offer letters will be provided for academic year appointments, and separate offers for summer employment. In brief, the offer letters are due 90 days in advance of the start date and the offer letters will be followed up with a job description due at least two weeks in advance of the start date, unless there are extenuating circumstances (including grant funding, term dates, etc).

The offer letter describes the terms of the appointment, and the job description provides additional details. Insofar as work schedules go, the supervisor assigns the work and sets the schedule per [Article 6.9](#). Inasmuch as the typical half-time appointment requires 20 hrs/week on average for the term of appointment, work schedule flexibility must be approved by the supervisor and meet business needs. This can be documented/updated via email.

In most cases, the faculty member with whom the student will be working as a Research Assistant will also be the student's Major Advisor and will determine the appropriate duties. In some cases, the student will be assigned activities that may also relate to their graduate research project, while in other cases, the student may also work on projects that are unrelated to their graduate work.

Tentative Teaching Assistant assignments are considered on the basis of course and faculty needs, and graduate students' schedules, skills and interests. In some cases, these tentative assignments must be changed due to scheduling conflicts, unexpected changes in class enrollments, or other unanticipated factors.

Salary minimums are established by the WSU/UAW Contract based on educational experience and location per [Article 35](#).

Summer Expectations

Students on academic year support generally also receive summer support (either hourly or summer assistantship). Standard practice is for graduate students in Horticulture to spend their summer session on their graduate research project(s) and supporting other research projects within their Faculty Advisor's program. Expectations for the summer session should be discussed between the student and Faculty Advisor.

Scope of Overlap Between ASE RA Duties and Academic Research/Training ([link](#))

Research Assistant (RA) duties

As a 0.5 FTE Academic Student Employee (ASE), RAs are expected to devote an average of 20 hours per week to the duties outlined in their appointment letter, which may include tasks such as programming, data collection and analysis, lab maintenance, attending meetings, writing papers, conducting activities related to grant-funded project goals, and more, as defined by their supervisor.

At least two weeks prior to the commencement of each semester, RAs are to be given a job description (or changes to a job description for reappointment). The job description is to adhere to provisions outlined in the [WSU/UAW Contract Article 11.4](#).

RA overlap with academic research and training

In many cases, the 20 hours per week of paid RA work will align with and contribute to the student's academic research and training. In this case, the RA appointment is intended to provide financial support for time spent on activities that fulfill the student's employment obligations and advance their academic progress. However, it is recognized that not all RA duties will directly relate to the student's academic research and training.

Academic research and training (outside of RA)

Students are expected to dedicate additional time beyond the 20 hours of weekly RA duties to make timely progress on their academic research and training (including but not limited to their thesis or dissertation). The amount of additional time required may vary depending on the requirements of their graduate program.

During the regular academic year, this research and training is required for their academic progress as measured by PREFIX 700 or 800 research credits each term. Whereas students are not typically enrolled in research credits during the summer, they are still expected to make progress on their academic research and training. Summer progress should be determined by the student's graduate program and advisory committee and should align with their overall academic goals and timeline. Although the exact number of hours may fluctuate, students should anticipate spending a substantial amount of time on their academic work outside of their RA duties to ensure satisfactory progress in their graduate program.

Separate assessment of academic performance and employment duties

The student's academic research performance will be assessed independently from their performance of assigned RA duties. Academic research performance is measured by PREFIX 700 or 800 research credits during the regular academic year and overall academic progress during the summer.

- Each year, the student's academic progress will be evaluated, at minimum, by their advisory committee based on factors such as academic milestones, quality of work, and overall progress toward completion of the thesis or dissertation.
- At least annually, the ASE's performance is to be assessed separately by their assistantship supervisor, as described in the [WSU/UAW Contract Article 33.4.2](#). This assessment focuses on fulfilling assigned duties, quality of work, professionalism, and other relevant factors outlined in the appointment letter and job description.

Communication and oversight

Regular communication between the student, RA supervisor, major professor/advisor (if different than RA supervisor), and graduate program leadership is crucial to ensure an appropriate balance between employment duties and academic progress. Students are to raise any questions they have about distinguishing between their RA duties and their academic research and training (including but not limited to their thesis or dissertation) to their supervisor or program director. Supervisors and program directors are to periodically review the RA's responsibilities and adjust as needed to optimize the student's overall academic and professional development.

Breaks and leave

It is important to note that breaks in the academic calendar, such as finals week, the period directly following finals, the period directly before the start of a semester, and Spring Break, are not considered holidays unless they align with official University Holidays. RAs planning to take leave during these

periods must seek advanced vacation approval from their supervisor. In case of illness, sick leave should be appropriately requested according to University guidelines. Failure to follow these guidelines may result in unscheduled absences and misunderstandings between the student and their supervisor as well as potential pay impacts.

Summary

Whereas an RA appointment at 50% FTE will support a student's academic research and training, often relating to their own independent research project, it is understood that some RA tasks may not directly align with the student's specific independent research topic. Likewise, to fulfill their academic obligations, students are expected to devote additional time to academic research and training beyond their RA duties and expectations. The student's academic research performance and employment duties are to be assessed separately each year to ensure a fair evaluation of both components. Open communication and regular check-ins between all parties are essential to support the students' success in their dual roles as researchers in training and as employees.

ASE Performance Evaluation

At least annually, the ASE's performance is to be assessed by their assistantship supervisor as described in the [WSU/UAW Contract Article 33.4.2](#). This assessment focuses on fulfilling assigned duties, quality of work, professionalism, and other relevant factors outlined in the appointment letter and job description. This ASE performance evaluation is for employment purposes only and does not replace the required *Academic Evaluation of Students*. While ASE performance evaluations for assistantship employment and academic evaluations may be conducted at the same time, each type of evaluation must be retained separately at the academic unit level.

ASE Time Off

This [ASE Paid Time Off guide](#) describes time off for ASE employees, both Vacation time off, Sick leave, and also Short-Term Parental Leave.

Vacation time off requests are to be submitted to and approved by the supervisor prior to time off being taken. To request time off, ASEs are to provide written notice (i.e., email, text, IM) to their supervisors in advance of the requested time as soon as the need for time off is known. Supervisors are expected to respond in a timely manner. If an ASE is requesting vacation time off, they are to provide a work plan for any duties assigned and/or expected to be performed during their time off with their vacation request. Accurate time offs (sick, vacation, leave without pay) must be entered into Workday each pay period for which an ASE takes time off. See [Workday Knowledge Base Employee Request and Correct Time Off](#) for detailed instructions. ASEs are responsible for reviewing Workday notices to certify time offs submitted on their behalf

Sick leave time off may only be used for reasons described in [Article 30.1.3](#). When ASEs need to be absent from work for sick purposes, they are to provide notice of the request to their supervisors as soon as the need is known.

Academic year leave balances expire May 15 and will be wiped by June 1. Fall to Spring leave balances will roll over when reappointed. Summer Assistantship leave balance are separate from academic year and will be wiped on Aug 15.

Vacation Time Off (WSU/UAW Contract, Article 28)	Sick Leave (WSU/UAW Contract, Article 30)
Salaried ASEs with 50% FTE on a 9-month appointment will receive 48-hours	Salaried ASEs with 50% FTE on a 9-month appointment will receive 36-hours
Salaried ASEs below 50% FTE or appointed to a lesser term (i.e. Summer, or late start) will have prorated vacation time off	Salaried ASEs below 50% FTE or appointed to a lesser term (i.e. Summer, or late start) will have prorated sick leave
Hourly ASEs not eligible	Hourly ASEs are eligible Accrual Rate: 1 hour of sick leave for every 40 hours worked
Summer PAP not eligible	Summer PAP not eligible
Unless otherwise approved, vacation time off must be used in four-hour increments during academic semester breaks or as otherwise mutually agreed upon by the ASE and their supervisor. Vacation time off requests are to be submitted to and approved by the supervisor prior to time off being taken.	Sick leave time off may only be used for reasons described in Article 30.1.3. When ASEs need to be absent from work for sick purposes, they are to provide notice of the request to their supervisors as soon as the need is known.

Payroll Deduction of Tuition and Mandatory Fees

For details on how to arrange for automatic deduction of tuition and fees from your paychecks, please see [Graduate Student Enrollment Procedure | Payroll Services | Washington State University](#)

Certification of Assistantship Duties

Tuition waivers associated with an assistantship appointment are contingent upon the following factors: 1) remaining enrolled full-time during the period of appointment; 2) maintaining a 3.0 cumulative GPA during the appointment (or approved exception to policy), and 3) meeting the service requirement of an average of 20 hours per week for a 0.5 FTE appointment as scheduled by your department/supervisor (based on hours required for partial FTE appointment). This certification is completed annually by way of the Graduate Student Annual Review form. For graduating students, this may alternatively be done by way of the Post-Graduate Information form (*in lieu* of the Annual Review form).

Establishing Residency

Because tuition is considerably less expensive for Washington residents than out-of-state students, you should take steps to establish residency within the first 30 days of arrival in Washington state. Please review [Establishing Residency](#) for more information and to ensure a successful residency application at the start of your third semester.

For students holding an assistantship, the non-resident domestic student will receive the non-resident differential tuition waiver for their first year of graduate studies, if living in WA state during enrollment at WSU. However, the non-resident differential tuition waiver cannot be guaranteed beyond one year. Students who have not established Washington State residency by the one-year limit will be required to pay non-resident tuition, even if they have an assistantship.

SAFETY

Safety at WSU is regulated by the [Washington State Department of Labor and Industries](#) and the US [Occupational Safety and Health Administration](#) (OSHA), through WSU [Environmental Health and Safety](#). A safe and healthy working environment at WSU is to be maintained at all times.

It is the responsibility of each graduate student to become familiar with safety policies and to follow safe procedures for the location they are working at. Departmental policies and procedures regarding safety are detailed in the WSU Safety Policies and Procedures Manual (SPPM) available at the [Office of Procedures, Records and Forms](#), while policies and procedures specific to individual labs are detailed in the Laboratory Safety Manual located in each lab. Information regarding physical and health hazards, entry routes, permissible exposure limits and precautions or controls for safe use, including emergency first aid procedures, and the name, address and telephone number of the chemical manufacturer or supplier for all chemicals is available on Material Safety Data Sheets (MSDS) located in the individual labs in which the chemicals are used. [Environmental Health and Safety](#) (EH&S) is also responsible for laboratory and workplace safety, public health and environmental issues, hazardous materials and wastes (except radioactive materials), and training. All disposals of hazardous chemical wastes must be made through EH&S's [Environmental Services](#).

There is a [College Safety Committee](#) in Pullman and at each off-campus site. Students located at branch campuses or Research and Extension Centers should consult their site's safety committee and the specific safety requirements at those locations. These safety committees serve as resources for all safety-related issues, except radioisotope use, which is handled by the WSU [Radiation Safety Office](#). Students are required to attend an informational safety meeting in their first year, and if using radioactive materials, must complete online [Radiation Safety Training](#) prior to their use.

Report all accidents and injuries, however minor, to the administrative office at your location and complete an electronic accident/illness [Incident Report Form](#).

SERVICES

Graduate and Professional Student Association

The [Graduate and Professional Student Association](#) (GPSA) is the representative body for graduate and professional students at WSU. GPSA operates a number of programs that serve graduate and professional students, including the GPSC Study Center, which is a free service to graduate and professional students and features state of the art machines and printing services. GPSA also offers Travel and Registration Grants to financially assist students attending conferences and meetings.

Graduate Writing and Professional Center

The [Graduate and Professional Writing Center](#) (GPWC) is located in Smith CUE 403 (509-335-3413, gpwc@wsu.edu). GPWC assists graduate and professional students from all disciplines with all types of written communications from papers and publications that must be written as researchers, to syllabi and assignments students must prepare as teachers. The GPWC **does not offer proofreading or counseling services**.

Office of International Students and Scholars

The [WSU International Programs, Global Services](#) office, located in Bryan Hall 108 (509-335-1083, ip.globalservices@wsu.edu) assists incoming and current international students with information on their immigration status and visa matters, as well as non-academic matters such as understanding US culture and the academic system.

Campus Safety

Washington State University is committed to maintaining a safe environment for its faculty, staff, and students. Safety is the responsibility of every member of the campus community and individuals should know the appropriate actions to take when an emergency arises. Please go to for more information:

WSU Emergency Management web site: <http://oem.wsu.edu>

WSU Pullman Campus Safety Plan at: <http://safetyplan.wsu.edu>

Students at RECs will be provided with site-specific safety information.

Cougar Health Services

Health care concerns can be addressed through Cougar Health Services. Information on services, making appointments, pharmacy, health promotion, insurance, and more can be accessed online at [Cougar Health Services](#).

Graduate Student Health Insurance

WSU offers health insurance to eligible graduate student assistants, and for international students holding F1 and J1 visas. Complete information regarding the health plans is provided on the [Cougar Health Services website](#). Graduate assistants and international students will be automatically registered for the proper health plan. You are strongly advised to review the Cougar Health Services website to learn more about your plan.

Students who do not qualify as a dependent on another person's insurance and who are not eligible for one of WSU's plans can also purchase a plan through the [Washington Health Benefit Exchange](#). If you meet certain financial criteria, you may be eligible for Apple Health (Washington Medicaid), which is accepted by Cougar Health Services at Pullman.

Mental Health Resources for WSU Graduate Students

We have prepared this guide, [Mental Health Resources for WSU Graduate Students](#), to help assemble what's available for our Pullman graduate students, as well as our graduate students located state-wide.

FACILITIES

Students should consult with administrative staff at their location regarding available facilities in Pullman, at any of the branch campuses ([Spokane](#), [Tri-Cities](#), or [Vancouver](#)), the [Irrigated Agriculture Research and Extension Center](#) (IAREC) in Prosser, the [Tree Fruit Research and Extension Center](#) (TFREC) in Wenatchee, the [Puyallup Research and Extension Center](#) (PREC), or the [Mount Vernon Research Center](#) (MVRC).

IMPORTANT WEBSITES

Department of Horticulture

<https://horticulture.wsu.edu>

Includes links to this handbook and seminar schedules.

Graduate School

Forms: <https://gradschool.wsu.edu/forms/>

- Application for Degree
- Committee Change form
- Deadlines and Procedures for Graduation (M.S.) and (Ph.D.)
- Dissertation Agreement form
- Dissertation and Thesis Guidelines
- Dissertation/Thesis Acceptance Final Examination Scheduling form
- Hold Harmless Agreement/Copyright Acknowledgement form
- Preliminary Examination Scheduling form
- Program of Study (M.S.) form
- Program of Study (Ph.D.) form
- Survey of Earned Doctorates

Graduate School Policies and Procedures Manual <https://gradschool.wsu.edu/policies-procedures/>

Graduate Student Code of Rights and Responsibilities (Chapter 12) - <https://confluence.esg.wsu.edu/display/MPS/Chapter+Twelve+-+Graduate+Student+Rights+and+Responsibilitiestwelve/>

Safety

Accident/Illness Incident Report Form (EH&S)

<https://shibidp.wsu.edu/idp/profile/SAML2/Redirect/SSO;jsessionid=jx39g18jzrqms457cro95o0k?execution=e1s1>

Environmental Health and Safety <http://ehs.wsu.edu/>

Institutional Animal Care and Use Committee <http://www.iacuc.wsu.edu/>

Institutional Biosafety Committee <https://biosafety.wsu.edu/>

Institutional Review Board <http://www.irb.wsu.edu/>

Radiation Safety Office (Pullman) <http://www.rso.wsu.edu/>

Safety Policies and Procedures Manual (SPPM) <https://policies.wsu.edu/prf/index/manuals/safety-policies-procedures-manual/>

University Recreation (services, including First Aid Training) <https://urec.wsu.edu/>

U.S. Occupational Safety and Health Administration (OSHA) <http://www.osha.gov/>

Washington State Department of Labor and Industries <http://www.lni.wa.gov/>

Other

Technology Support (Pullman) <https://pullman.wsu.edu/classrooms/technology-support/>

Center for Interdisciplinary Statistical Education and Research <https://ciser.wsu.edu/>

Central Stores (Pullman) http://facops.wsu.edu/CentralStores/cs_about.asp

CougarCard Center (Pullman) <http://cougarcard.wsu.edu/>

Cougar Copies (Pullman) <https://cougprintsplus.wsu.edu/>

Cougar Health <https://cougarhealth.wsu.edu/>

Horticulture Farm Use Request Form (Pullman) <https://horticulture.wsu.edu/gardens-orchards/orchard/>

Graduate and Professional Student Association (GPSA) <http://www.gpsa.wsu.edu/>

Graduate Writing Center (Pullman) <https://writingprogram.wsu.edu/graduate-writing-center/>

International Programs <https://ip.wsu.edu/>

CAHNRS Business Office <https://business-center.cw.wsu.edu/>

Motor Pool (Pullman) <http://facops.wsu.edu/motorpool.asp>

Office of Procedures, Records and Forms <https://policies.wsu.edu/prf/>

Office of Research Assurances <http://www.ora.wsu.edu/>

Plant Growth Facility (Pullman) <https://pgf.wsu.edu/>

Residency Information <https://residency.wsu.edu/>

Standards of Conduct for Students <http://conduct.wsu.edu>

WSU Organic Farm (Pullman) <http://css.wsu.edu/organicfarm/>

Other Campuses:

Irrigated Agriculture Research and Extension Center, Prosser <https://iarec.wsu.edu/>

Mount Vernon Research Center <http://mtvernon.wsu.edu/>

Puyallup Research and Extension Center <http://www.puyallup.wsu.edu/>

Tree Fruit Research and Extension Center, Wenatchee <https://tfrec.cahnrs.wsu.edu/>

WSU Spokane <http://spokane.wsu.edu/>

WSU Tri-Cities <http://www.tricity.wsu.edu/>

WSU Vancouver <http://www.vancouver.wsu.edu/>

APPENDIX A: Guidelines for Responsibilities of Graduate Students, Major Advisors, and Faculty Committee Members

Each graduate student's Major Advisor should be committed to their education and training of the graduate student as a future member of the research community. Each graduate student's Faculty Advisory Committee, once approved on the Program of Study, has the responsibility of directing the student's progress, supervising the dissertation, and participating in the preliminary and final examinations."

The graduate student's Major Advisor and Faculty Advisory Committee are responsible for setting, assessing, and maintaining standards for the graduate student. Requirements set by the Major Advisor and Faculty Advisory Committee may be in whatever form they feel is most appropriate for the student's progress toward degree, including courses and independent research, if necessary. Thus, each graduate student's program is individualized for that student's particular needs and interests, as well as compatible with the Major Advisor's research priorities.

Faculty Advisory Committee membership is regulated by the Horticulture Graduate Program Bylaws and Graduate School policy. Committee members should serve on a graduate student's Advisory Committee because of their abilities and qualifications to assist the student in completing their specific graduate program.

The graduate student is ultimately responsible for successful completion of their degree and is expected to maintain a high level of professionalism, motivation, engagement, excellence, scholarly curiosity, and ethical standards.

Responsibilities of the Graduate Student:

- Be knowledgeable of the policies, deadlines, and requirements of the Graduate School and Horticulture Graduate Program.
- Participate in the Graduate School's Responsible Conduct of Research Training Program and practice those guidelines.
- Contribute to maintaining an academic environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment.
- Lead and conduct their research in an ethical and honest manner.
- Work with their Major Advisor to develop a thesis/dissertation project.
- Meet frequently (minimum of once every week recommended) with their Major Advisor.
- Select a Faculty Advisory Committee and complete a Program of Study, in consultation with their Major Advisor, early in their tenure (by second or third semester) in the Graduate Program.
- Meet with their Faculty Advisory Committee, individually or collectively, at least once each semester, but no less than once each year, to apprise them of progress on coursework and research.
- Attend and participate in conferences, meetings, seminars, and other professional events.
- Provide a realistic timeframe for writing and revising their thesis/dissertation to the satisfaction of their Major Advisor.
- Provide a thoroughly reviewed and revised thesis/dissertation to each Faculty Advisory Committee member several weeks before the required Scheduling Form is due at the Graduate School.

Responsibilities of the Major Advisor:

- Provide an academic environment that is intellectually stimulating, emotionally supportive, safe, and free of harassment.
- Discuss with the graduate student the policies and expectations on work hours, sick leave, vacation time, and working relationships with staff and other students.
- Be knowledgeable of the requirements and deadlines of the Graduate School and Horticulture Graduate Program.
- Ensure that a graduate student's assistantship contributes to their professional development and does not impede their progress toward degree.
- Provide leadership by example to facilitate the training of the graduate student in complementary skills needed to be a successful researcher.
- Guide the student in selecting a Faculty Advisory Committee.
- Help plan and direct the graduate student's research project.
- Provide guidance on appropriate coursework for their graduate degree.
- Meet frequently (minimum of once every week recommended) with the graduate student to provide advice and input on their research progress.
- Involve the student in professional activities, such as, conferences, peer review, extension events, field days, teaching, etc.
- Discuss authorship policies on research articles and conference presentations with the graduate student (see WSU Office of Research's *Guidelines for Authorship Determination for Manuscripts*, <https://research.wsu.edu/office-research/policies/authorship/>)
- Guide and advise a Ph.D. student on their preparedness for the preliminary examination.
- Solicit question for the written preliminary examination from Faculty Advisory Committee members and organize them so as to avoid duplication.
- Thoroughly review and suggest revisions to the thesis/dissertation before it is sent to Faculty Advisory Committee members for review.
- Lead the oral preliminary and final defense examinations.
- Advise and prepare the student for their professional career after graduation, including assistance in finding an appropriate position.
- Avoid faculty rivalries from interfering with duties as Major Advisor.

Responsibilities of the Faculty Advisory Committee members:

- Provide advice to the student on their coursework and input on their research progress.
- Meet with the student individually or in committee at least once each year.
- Provide written or verbal comments and evaluations of the graduate student's questions and/or work in a timely manner.
- Provide written questions for a Ph.D. student's preliminary examination.
- Review the student's thesis/dissertation in timely manner after it has been thoroughly reviewed by the Major Advisor.
- Actively participate in the student's oral preliminary and final defense examinations.
- If appropriate, provide requested recommendations for the graduate student's applications for professional positions before or after graduation.
- Avoid faculty rivalries from interfering with duties as a member of a Faculty Advisory Committee.
- Excuse yourself from serving on graduate committees when there is a potential or appearance of conflict of interest.

APPENDIX B: General Checklists for M.S. and PhD Degrees

Please provide a date when each activity is completed. If not applicable, write "N/A". Refer to the Handbook for specific details.

Activity/Milestone	Timeline	Date(s) completed
Begin steps to establish residency	Within 30 days of arrival	
Complete research credit hours – refer to Graduate Student Handbook for the specifics of your degree program	While enrolled	
Complete teaching/outreach experience	As scheduled	
Meet with new advisor, understand work expectations for courses, research, and teaching (if applicable); identify a minimum of 2 additional committee members (i.e., in addition to your advisor)	First semester preferred	
Meet with graduate committee	Each semester preferred	
File Graduate Program of Study with Graduate School	By end of second semester	
Complete HORT 508	Second semester preferred	
Complete and have Research Proposal approved by Faculty Advisory Committee	First year preferred	
Review and complete training needs for research (e.g., IACUC, IRB, IBC, and/or RSC)	First year	
Complete HORT 509 - Seminar	Every full-time semester (except when enrolled in HORT 510 - Seminar)	
Enroll in HORT 700/800 Research Credits (minimum of 1 credit/semester)	Every semester	
Complete Preliminary Exams (PhD students only - minimum of 2 credits of HORT 800 required)	Second year preferred	
Annual review of progress with advisor	Every year (usually due by end of March)	
Prepare to graduate and follow Graduate School checklist on the Graduate School Forms website	Final semester	
Complete HORT 510 – Seminar	Final semester (not available in summer)	
Complete thesis or dissertation defense (minimum of 2 credits of 700/800 required)	Final semester	
Exit survey and interview with Dept. Chair	Upon graduation	