Oregon State University

DEPARTMENT OF CROP & SOIL SCIENCE

College of Agricultural Sciences

GRADUATE STUDENT HANDBOOK

For

CROP SCIENCE and SOIL SCIENCE PROGRAMS

Updated May 2026

CSS Graduate Handbook – May 2026

https://cropandsoil.oregonstate.edu/cropandsoil/graduate/graduate-student-handbook

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1. WELCOME

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Welcome to the Department of Crop and Soil Science (CSS). Pursuing a graduate degree within the CSS department presents a distinctive opportunity to acquire advanced scientific knowledge, engage in meaningful research contributions, and foster professional development. Furthermore, it provides valuable exposure to the peer-review process and encourages critical reflection on the ethical standards of scientific practice. The extent of your commitment and effort will directly influence the academic and professional benefits you derive, as well as your preparedness for a career in the scientific community.

This handbook serves as a resource to support your progress toward degree completion. It is intended to complement, rather than replace, the information provided by the Office of Graduate Education and the official policies of Oregon State University. While it does not encompass all requirements established by the Office of Graduate Education, it offers detailed guidance on departmental policies and procedures specific to graduate students in the Department of Crop and Soil Science. I strongly advise you to work closely with your major advisor. However, feel free to approach the CSS graduate committee as well as the department head for facilitating conversation.

Department of Crop & Soil Science Graduate Programs

The Department of Crop and Soil Science offers two graduate programs: Crop Science and Soil Science. The Crop Science degree includes two options: 1) Plant Breeding and Genetics (PBG), and 2) Entomology (ENT). Soil Science includes different disciplines within its program such as soil physics, soil chemistry, soil microbiology, etc. Successful candidates may earn the MS or the PhD in any of these options. Much of this handbook is similar for students in any of the options. Where differences are present, they are outlined in detail.

Academic Disciplines

Original research is an essential part of MS and PhD thesis programs. **Each research program is individually designed by the student and their graduate committee.** Graduate students are expected to participate in the research program associated with their thesis and actively participate in ongoing research activities, regardless of their funding source as this work is an essential part of their training and provides an excellent opportunity for the student to apply knowledge gained in the classroom to field, greenhouse or laboratory situations.

See the specific course requirements for all degree options in Section 10.7.

Crop Science Study Options

Areas of study leading to MS and PhD degrees in Crop Science include, but are not limited to, crop breeding; genetics and cytogenetics; crop physiology and biochemistry; forage and pasture management; crop production; post-harvest seed technology; seed biology; seed crop physiology; seed production; weed science; and entomology.

Soil Science Study Options

Graduate programs in Soil Science lead to MS and PhD degrees with specialization in various fields of soil science including, but not limited to, environmental soil science; forest soils; nutrient cycling; soil geochemistry; soil conservation and land use; soil fertility and plant nutrition; soil genesis and classification; soil microbiology; soil physics; and water resources.

2. IMPORTANT PEOPLE AND INFORMATION SOURCES

2.1 Your Major Advisor

Your major advisor is your mentor in successfully navigating graduate school requirements. See sections 8.1 and 8.2 in this document for a list of your responsibilities in your success and those of your major advisor. See section 7 for guidelines to optimize this relationship.

2.2 Graduate Program Coordinator and AMP Advisor

Rachel Swindon - Rachel.Swindon@oregonstate.edu 541-737**-1286**

Rachel is responsible for graduate admissions, AMP advising, graduate student employment paperwork, course overrides, undergraduate student employee hiring, announcing graduate student defense dates, general CSS graduate student policy questions, Graduate Faculty nominations and department website maintenance.

2.3 Graduate Program Directors

Rory Mc Donnell - rory.mcdonnell@oregonstate.edu

Crop Science Program Director

Udayakumar Sekaran - udayakumar.sekaran@oregonstate.edu

Soil Science Program Director

2.4 Graduate Option Coordinators

Margaret Krause - margaret.krause@oregonstate.edu
Plant Breeding and Genetics Option Coordinator

Silvia Rondon - silvia.rondon@oregonstate.edu
Entomology Option Coordinator

These faculty members manage and coordinate CSS graduate programs. Individuals filling these roles will change over time, but they are available to address your questions about graduate school, CSS policies, or issues that cannot be addressed through interaction with your major advisor. They are also available to receive comments or suggestions about ways that the Department can improve the graduate program. You may speak with them about concerns you are uncomfortable discussing with your major advisor or if you would like a different perspective. Additionally, you are welcome to contact the Department Head with any questions, concerns, or suggestions related to your experience in the program.

The Office of Graduate Education (https://graduate.oregonstate.edu/) is the official administrative unit of your graduate enrollment and tracks progress towards your degree. While your major advisor can help you navigate the Office of Graduate Education system, in some cases, it may be most effective to seek guidance directly from the Office of Graduate Education, especially for issues that extend beyond the Department's scope.

2.5 Administrative Manager/Assistant to Department Head

Jolene Bunce Jolene.Bunce@oregonstate.edu 541-73**7-5854**

Jolene assists the Department Head with signature requests and scheduling meetings with the Department Head.

2.6 Office Specialist

Emmalie Goodwin Emmalie.Goodwin@oregonstate.edu 541-73**7-2821**

Emmalie is responsible for office, building and lab keys, AV equipment, purchase and travel requests, office assignments, expense reimbursements, meeting space reservations, and day-to-day logistics.

2.7 Information Technology (IT) and Computer Support Group

University Information and Technology https://technology.oregonstate.edu/help 541-73**7-8787**

The Service Desk is your go-to resource for technology support, offering assistance to students, employees, and associates. Please keep your advisor informed of any computer-related issues you may encounter.

2.8 Office of Graduate Education

Main website: https://graduate.oregonstate.edu/
Guide to success: https://graduate.oregonstate.edu/graduate-student-success

The Office of Graduate Education at OSU assures quality and consistent interpretation of Graduate Council policies related to graduate education across all programs. The OSU Catalog is the official source for information regarding OSU graduate education policy and procedures. It is the student's responsibility to refer to the catalog for this information.

The Office of Graduate Education supports students throughout the academic lifecycle, from admissions to degree completion.

The Office of Graduate Education, and its campus partners, offer an array of professional development opportunities specific to the success of graduate students. Topics include research and ethics, teaching and facilitation, writing and communication, leadership and management, career skills, grad life and wellness. Please visit the Office of Graduate Education links to browse our student success offerings.

2.9 CSS Department Website

General website: http://cropandsoil.oregonstate.edu
Graduate student pages: https://cropandsoil.oregonstate.edu/cropandsoil/css-graduate-program. Refer to the Departmental website for policies and procedures for CSS graduate programs.

2.10 CSS Graduate Faculty

Crop and Soil Science Graduate Faculty: *https://cropandsoil.oregonstate.edu/crop-and-soil-science/directory/faculty*

The above links provide a list of CSS faculty. Only faculty who are designated *graduate faculty* can serve as major or co-major advisors for CSS degrees or serve on student committees. Faculty members may request the graduate faculty designation.

When considering selection of your graduate committee, see section 16.2 for information on the branch experiment stations; many of the faculty at experiment stations accept graduate students and can serve as a major advisor or as a committee member.

2.11 International Programs Office

Information for new international students and visiting scholars:
https://internationalservices.oregonstate.edu/international-osu

The Office of International Services provides a wide variety of services and assistance for international students.

3. FIRST THINGS TO DO WHEN YOU ARRIVE ON CAMPUS

3.1 Check your admission status and degree

Graduate students may be admitted as regular, conditional, provisional, or special (non-degree). You may be admitted to the Master of Science (MS) or Doctor of Philosophy (PhD) program. Review your admission status and degree program carefully to ensure they align with your educational goals and confirm that all information is accurately recorded. Refer to the https://catalog.oregonstate.edu/ for definitions of student status and reclassification requirements.

3.2 Obtain your student identification (ID) card

http://fa.oregonstate.edu/business-affairs/idcenter

To obtain a student ID card, you must show evidence of official admission to OSU at the Identification Center in the Memorial Union (MU) room 103 (2501 SW Jefferson Way, Corvallis, OR 97331).

3.3 Obtain your keys, mailbox and desk space

As a graduate student at Oregon State University, you are eligible for departmental mail delivery and office space. You may require access to buildings and research areas during the times when the University is closed.

Keys: Check with your major advisor regarding keys needed, then have your major advisor send a list of keys needed and your student ID number to Emmalie Goodwin. Greenhouse key requests are handled by Greenhouse Operations (located in the East Greenhouse). Once your keys are ready, they can be picked up at the OSU ID Center in the Memorial Union, Room 103.

Mailboxes: All graduate students who are in residence are assigned a mailbox. The mailboxes are located in the Agricultural Life Sciences (ALS) Building, room 3017 or the Crop Science Building, room 107. United States and campus mail are delivered and picked up twice daily.

Office and desk space: As space permits, the department provides a desk for each graduate student in an office shared with other graduate students.

3.4 Get Connected

Computing and Information Technology (IT) support for the Department is coordinated through the ROOTS IT Support Group (roots.support@oregonstate.edu). Their website provides information and contact information of people who can help with a wide range of IT needs: http://support.roots.oregonstate.edu/. General IT support across campus is coordinated through OSU Information and Technology: https://uit.oregonstate.edu/

Once you are accepted to graduate school at OSU, you get an OSU Network ID (ONID) account. ONID login credentials are your portal to OSU online services, including registration, viewing, and obtaining transcripts, and checking your employment status. An email address is associated with your ONID account. You may request a CSS-specific address to link with your ONID account. See the ROOTS IT Support Group to get started.

As a CSS computer user, you have access to the following network SharePoint:

- **U Drive:** A personal directory that only you can access; it has a limit of 14GB and is archived nightly.
- **R Drive:** This is the department-wide research directory. It provides file sharing for labs and other work groups.
- **S Drive**: This is the department-wide shared directory and houses other files commonly used by department members.

3.5 Set up your payroll

If you are appointed to a graduate assistantship, complete all required paperwork promptly. You will receive these documents via email from Human Resources (HR). Timely submission is essential to ensure your appointment is processed without delay. Doing this ***as soon as possible*** will avoid a delay in receiving your first paycheck. International students must bring the original work authorization documents to HR; they are listed on page 4 of the I-9 form. Students on fellowships will also need to complete paperwork. The department office handles these appointments as well.

At the time you establish your payroll, you will complete federal tax withholding forms. The Valley Library provides tax booklets or you can visit the Internal Revenue Service website http://www.irs.gov/.

3.6 Register for classes

Catalog and Schedule of Classes: http://catalog.oregonstate.edu/

With your major advisor, and your graduate committee, you will develop a comprehensive program of study, detailed in Section 10.4 of this document. Confer with your major advisor to design an initial study plan for the first term. The current Schedule of Classes will provide information and detailed instructions on registration: https://classes.oregonstate.edu/

When considering registration, review the content in Section 11 of this document for degree credit requirements, Section 6 for polices about summer enrollment and employment, and Section 5 if you have a graduate assistantship of any type.

Be sure to register for the correct classes and note the various registration deadlines listed on the OSU Academic Calendar. There are fees associated with late registration.

4. ORIENTATION EVENTS

4.1 Required Orientation for All New Graduate Students

This orientation session is sponsored by the Office of Graduate Education during the fall term. Check the Office of Graduate Education Calendar for scheduling and registration information.

4.2 Orientation and Training for New Graduate Teaching Assistants (GTAs)

This is sponsored by the Office of Graduate Education each fall term. If you will be a GTA during the coming academic year, or if you have an interest in teaching, you should attend this training.

4.3 CSS Orientation Session

CSS new graduate student orientation session is held each fall during the week prior to classes. All new graduate students are expected to participate. Continuing students are encouraged to attend to learn about new policies and procedures.

4.4 International Student Orientation and Document Check

https://internationalservices.oregonstate.edu/international-students/getting-here

All newly admitted international students are required to attend an international student orientation and the immigration document check-in session. You cannot register for classes if you do not attend both. If you are unable to attend one or both of these sessions, contact the Office of International Services. To cover the cost of orientation, all students will be charged an orientation fee. This one-time fee will be charged automatically to your OSU student account. If you are on a state-funded teaching or research assistantship that pays for your tuition, this fee will be automatically paid for you.

This session will provide information about:

- Immigration rules and regulations that affect your visa status.
- OSU student health services and health insurance requirements.
- Academic life at OSU and how to register for classes.
- Campus and community resources.
- Opportunities to meet other new international and domestic students at OSU.

4.5 University Day

https://universityday.oregonstate.edu/

This event initiates the new academic year; it is a celebration of OSU. Visit the expo to learn about other departments and service units across campus, as well as community and resources. Usually there is a free lunch!

5. GRADUATE ASSISTANTSHIPS

Graduate student assistantships awarded by the department are of two types: Graduate Research Assistantships (GRA) and Graduate Teaching Assistantships (GTA). A graduate student may be offered either or both types for their Graduate Assistantship (GA). The minimum appointment is 0.40 full-time equivalent (FTE) and may be split as GRA and GTA depending on the student. The maximum FTE is 0.49.

Office of Graduate Education Description: *https://graduate.oregonstate.edu/finance*

5.1 Graduate Research Assistantships (GRA)

Graduate Research Assistant (GRA) positions are part-time appointments ranging from 0.4 to 0.49 FTE. Students awarded a GRA position support faculty in conducting research projects. GRA appointments are not automatically renewed within the department. Continued GRA support depends on the availability of funding or the continuation of the associated grant, as well as the student's satisfactory academic progress and fulfillment of employment eligibility requirements. Research project leaders or the department head may create ad hoc GRA positions; such appointments are for terms of one year or less. They may be subject to annual renewal based on program need, academic performance, and availability of funds. GRA renewals are considered each spring and are normally made effective September 16. Major advisors evaluate students based on coursework, progress on thesis research, and other contributions to the major advisor's research program. When adequate budgetary support is available, the department will renew appointments of GRAs, but only for students with satisfactory performance in the position and who have not completed their graduate study.

GRAs on 0.49 FTE appointments will provide an average of 19.6 hours of non-thesis service per week for the assistantship. Since GRAs ordinarily do research under their appointment as part of their thesis, separating work for which they are paid and work for their thesis may not always be easy. This is an important subject to discuss with your major advisor (see section 7). GRAs at other FTE levels are expected to provide proportional levels of service.

5.2 Graduate Teaching Assistantships (GTA)

GTAs in the CSS department are typically 0.49 FTE appointments. Students who receive a GTA appointment assist faculty in delivering courses by teaching and/or grading.

Appointment and re-appointment of GTAs will be made at the discretion of the Department Head or the Department Head's assignees. Only fully qualified students will be considered for appointment as a GTA in the department. GTAs must also have demonstrated previous competence as a GTA in order to be re-appointed. Appointments and re-appointments will be made to provide the support needed for instruction of CSS course offerings and to create learning opportunities for students in the art of teaching.

Many of the GTA appointments in our department assist in teaching SOIL 205 – an undergraduate class with five labs each term; other GTA appointments exist. As a GTA, you must master the course content and gain the ability to communicate ideas clearly. This is a skill that is central to success in your graduate studies and professional life. As with GRAs, ***there are not automatically recurring GTA positions in the department***. GTA appointments are typically for a term, although you may be offered multiple GTA appointments within a year or over the course of your graduate tenure.

The maximum number of quarters appointed as a departmental GTA is four for MS degree students and eight for PhD degree students. This policy does not govern the assignment of CSS graduate students to GTA appointments in other departments or programs.

GTAs on 0.49 FTE appointments are expected to provide an average of 19.6 hours of service per week for the assistantship. GTAs at other FTE levels are expected to provide proportional levels of service. The instructor of the course for which the GTA is assigned to will be the GTA's direct supervisor. If the GTA would like to take time off at any point during their appointment as a GTA, they must formally request the time off from their direct supervisor, who is the instructor of the course.

5.3 Stipends and Remissions

Assistantships provide a monthly stipend. The amount of these stipends depends upon the fractional appointment. Stipends are tied to a base rate established by the University. However, the major advisor determines the specific stipend amount. The decision is based on the experience and qualifications of the student and availability of funds. At the start of each academic year, the Graduate Program Coordinator will present you with an offer letter that outlines your appointment terms, including the stipend amount.

Per CGE Collective Bargaining Agreement Article 12, graduate employees appointed at an FTE of 0.40 or greater receive tuition remission and are exempt from tuition payment for up to 16 credit hours. If an assistantship is awarded during the graduate student's first term, OSU will also remit the matriculation fee as well as the International Orientation Fee for international students.

Summer term graduate assistantship appointments are not automatically guaranteed. Many students working during the summer may be placed on an hourly wage appointment, with no tuition remission. Please discuss this with your major advisor. If you defend your thesis and graduate in a summer term, **it is Office of Graduate Education policy that you register for 3 credits that term**. All graduate degree candidates who use university resources during summer term must register for a minimum of 3 credits, as discussed in Section 6 of this document. Ecampus tuition is covered under remission policies. Cost of graduate tuition and fees can be found here: http://graduate.oregonstate.edu/admissions/cost

5.4 Health Insurance

All students receiving graduate assistantships of 0.40 to 0.49 FTE are automatically enrolled in Pacific Source insurance coverage unless they file a waiver indicating comparable insurance coverage with Student Health Services Insurance. **OSU pays 90% of the premium for employee-only coverage, plus 50% of the administration fee during the term(s) of your appointment. You must pay the remaining 10% of the monthly premium, plus 50% of the administration**

fee. Dependents can be added for an additional cost.

Visit https://studenthealth.oregonstate.edu/insurance for more information.

Article 28, Section 4 of the Coalition of Graduate Employees bargaining agreement indicates that graduate assistants' health insurance coverage for summer session will match the coverage level during their last appointment period. One-ninth of the total summer session health insurance for the appropriate level of coverage will be deducted from each of the monthly paychecks during the academic year, beginning in October and ending in June. Graduate Assistants wishing to opt-out of the summer coverage must submit an opt-out form to Student Health Services by **May 01, during the spring term preceding the "opt-out" summer.** The employee contribution for any summer coverage premium that was deducted will be refunded no later than June pay cycle. Students employed for a summer term, students on an hourly wage appointment, and students who will not return in the fall may enroll in the COBRA extension policy of the OSU student health insurance. Additional information about COBRA coverage can be obtained by calling Pacific Source Administrators: 877-355-2760.

Refer to https://hr.oregonstate.edu/graduate-student-insurance-plans for current information and to access health insurance forms.

5.5 Coalition of Graduate Employees

The Coalition of Graduate Employees (CGE) is the collective voice of the graduate student employees of Oregon State University. CGE is a labor union with the exclusive right to negotiate with OSU on behalf of graduate research and teaching assistants. The contracts CGE earns through collective bargaining determine the salary, working conditions, health coverage, and other rights and benefits of employment for the individuals they represent. Membership in CGE is voluntary and you may be required to contribute membership dues. For more information visit: http://cge6069.org/

6. SUMMER ENROLLMENT AND EMPLOYMENT

University policy states that any graduate student working toward a degree during the summer and using University resources (office, library, lab, and/or access to faculty) must be enrolled in a minimum of 3 credits. The department expected minimum enrollment is 3 credits for students supported during the summer by their major advisor. Students enrolled in fewer than 3 credits are **ineligible** to use university resources.

Students may be responsible for summer tuition and fees. Graduate assistantships with tuition or fee remissions are not guaranteed during the summer. Graduate students are not required to enroll in classes during the summer to work on grant-funded research. However, there may not be funds to pay your summer tuition or fees directly from grant or project funds held by your major advisor. Discuss strategies to cover the cost of summer tuition and summer employment opportunities with your major advisor. Students can be employed on an hourly basis during the summer.

During any term, students holding graduate assistantships may work as hourly student employees in addition to their assistantships. Graduate students with an assistantship can work a combined maximum of 24 hours per week (GA + hourly), but the additional hours available beyond a graduate assistant's contracted FTE cannot be used to extend the graduate assistant's work/duties. Graduate assistant work cannot exceed the maximum 0.49FTE per week. Additional hourly student work cannot be highly related or the same as what they are performing in their GTA/GRA positions. This is true for extra duties at any location within the OSU system. Exceeding the 0.49 FTE limit jeopardizes the student's assistantship eligibility.

7. CULTIVATING THE RELATIONSHIP WITH YOUR MAJOR ADVISOR

The quality of the interaction with your major advisor significantly influences your graduate school experience. Ideally, it should be a mutually enriching relationship that not only results in successful degree conferral but also maximizes the rewards and benefits from your time at OSU. Your major

advisor can play a pivotal role in your professional development and career success. Building a strong, collaborative relationship with your advisor should be a top priority during your time in graduate school. Both of you and your major advisor should develop mutually open, honest, and frequent lines of communication about the progress on your research projects and your degree. The sections that follow are meant to provide topics you can use to open a dialog with your major advisor. If not addressed, misunderstandings or differing expectations on these topics may arise, and can become sources of conflict.

Answers to the topics listed here form a starting point to discussions between you and your major advisor. Many students and advisors find it valuable to write down specific expectations, responsibilities, and timelines. These documents serve as a reference to guide your progress and when questions arise. Alternately, you and your advisor may prefer to cover this information verbally. If this is the case, it is still useful to make written notes during your conversations, and to note questions or topics to cover during your next conversation.

You and your major advisor are required to complete a formal annual review of your progress, as detailed in Section 13.1 of this document.

7.1 Research Expectations

You, your major advisor, and your committee must discuss research expectations.

Other important details to discuss could be, but are not limited to:

- How much freedom will you have in designing your research plan?
- How does the research you conduct for your thesis relate to the work you do as part of your broader research assistantship responsibilities? What are your major advisor's specific expectations regarding your contributions to research activities beyond your thesis project?

Your research is expected to be planned and designed to conform with the following principles:

1) Research must aim to draw **Valid Conclusions** about cause-and-effect relationships.
2) Experiments and observations are to be conducted in a rigorous and systematic way, minimizing bias and maximizing reliability to achieve **Scientific Rigor**:
3) Reproducibility is achieved through well-documented experimental design to allow other researchers to replicate the study and verify the findings.

Developing your conceptual approach and choosing an appropriate experimental design are activities that need to occur prior to the onset of data collection. You should verify your choices regarding experimental design and statistical analysis with a data analysis professional. For graduate students at OSU, the Statistics Student Consulting Service provides free statistical advice on University-related research projects. OSU faculty may also submit consulting requests to the Statistics Student Consulting Service, or they may directly contact the manager of the Statistical Consulting Lab at 541-737-1984. Fee-based consulting can be arranged as well in consultation with major advisor.

7.2 Authorship, Intellectual Property, and Data Management

Authorship is an important aspect of research expectations. Research is increasingly collaborative, even when done as part of an MS or PhD thesis. While there are broad guidelines for determining authorship, specifics vary. Discuss assignment of authorship, data share as well as right to use data related to your thesis or dissertation with your major advisor.

Many funding agencies require that data produced under grants be made publicly available. There is a growing trend to make nearly all scientific data "open source." In contrast, there may be restrictions on the communication of research results from work funded in part or wholly by private companies. For instance, a funding source may place an embargo on publishing work so that they have first access to the information. Also, your work may involve intellectual property that has commercialization potential. There are complex legal issues related to patentable results. These complicate how and when you communicate results. Be sure to discuss all of these issues with your advisor. See also *being part of a team* section below (7.4).

Storing and archiving data is another important issue. Granting agencies may require detailed data management plans as part of the proposals. Data management plans include the physical aspects of storing data in ways that minimize the chance for loss of data. Effective data management plans help prevent serious issues, such as omitting units, failing to provide clear descriptions of the data or how they were collected, or even misplacing the data entirely. A comprehensive data management plan, one that details how data will be shared and archived, is essential. Discuss your overall data management strategy with your advisor and determine whether any specific data management requirements apply to your project.

7.3 Assistantship Expectations

Discuss expectations for participation in lab activities with your major advisor and with other students in your group. Those with 0.49 FTE appointments will devote approximately 20 hours per week as part of their assistantship.

- What does this mean?
- What does it mean if your assistantship has a lower FTE?
- What are your specific position and job description expectations?
- Does your advisor expect you to keep regular hours in the lab? If so, what are they?
- Consider situations when you may be expected to work additional hours.
- Discuss these questions with your major advisor. Reaching an agreement on your participation in lab activities can help minimize misunderstandings and ensure that expectations are clear for both you and your advisor. For further guidance, refer to the research expectations outlined in Section 7.1 of this document.

7.4 Being Part of a Team

As a graduate student at Oregon State University, you represent not only yourself but also the State of Oregon, OSU, CSS, your lab group, and your advisor. Accordingly, you are expected to maintain ethical and professional conduct at all times, as your actions reflect on a broader community. Your major advisor may require review of any scholarly work, such as talks or publications, before it is shared with peers or the public. In addition, being part of a team involves obligations and responsibilities that are not specifically tied to your assistantship or research. For example, it is a common expectation that all lab members take part in mentoring and training undergraduate and new graduate students in research techniques and protocols. Other examples may include attending regular lab meetings, occasionally assisting other students, and contributing to clean, organized, and safe lab spaces. It is highly recommended that you discuss these broader expectations with your major advisor early in your graduate program.

7.5 Communication Schedule

Your major advisor is your direct and most frequent contact during your graduate program. Contact your advisor for assistance with any aspect of your graduate education. Many advisors and students find their relationship is most productive with frequent (weekly/monthly) communication on both professional and personal levels. Early in your degree program, discuss such expectations with your major advisor. For example, a student should discuss the following questions with his/her advisor:

- How often does the advisor expect updates on your progress (e.g., weekly/biweekly)?
- Does the advisor only want to hear from you if you have a specific question or problem?

Maintaining a line of communication is important for both the advisor and student.

7.6 Completing Your Degree Program

Develop a realistic schedule for data analysis, writing, revising, and defending your thesis or dissertation. You must allow adequate time for meaningful feedback from your major advisor and other committee members, and to edit and revise your initial draft. You must also coordinate your

writing schedule with the scheduling requirements set by the Office of Graduate Education for your defense. Your schedule may be affected by factors such as funding availability or expiration date of your visa. Early and frequent communication with your major advisor and the rest of your committee about this schedule is essential. It is strongly recommended that you develop a timeline for your program during your first committee meeting, and revise it as needed as you progress toward your degree (see Degree Completion Steps and Timeline guide at the end of the handbook).

Many of your interactions with your major advisor during your degree program will involve discussions on how best to analyze your results and to communicate those results to your peers through your thesis or dissertation and associated publications.

- Does your advisor expect to be consulted about each analysis or figure you produce?
- Would they prefer a more polished selection of analyses?
- Would they like to see a more fully formed product such as a results section before providing feedback, or would they like to be involved from the beginning?
- What are your expectations and preferences for input on the analysis and writing steps?

Maintain a regular flow of information, feedback, and interaction. Limited communication about data analysis, results, or review can significantly hinder your progress.

8. RESPONSIBILITIES

Several broad expectations govern students, advisors, and supporting administration of the CSS Graduate Programs.

8.1 Student Responsibilities

Students are expected to:

- Shoulder responsibility for their graduate program and initiate each step involved in obtaining the degree.
- Ensure that the members of their graduate committees are designated graduate faculty. If such is not the case, contact Rachel Swindon, CSS Graduate Program Coordinator.
- Demonstrate honesty and uphold ethical standards in all aspects of academic work.
- Meet regularly with the major advisor to discuss progress or challenges in research and coursework.
- Contact graduate committee members to schedule committee meetings.
- Submit required Office of Graduate Education forms.
- Contact the graduate program director or the department head if difficulties in the relationship with their major advisor cannot be resolved by open communication with the advisor.
- Engage willingly in their advisor’s research, teaching, and extension programs.
- Maintain a GPA of at least 3.0. Strive for excellence in all coursework and research.
- Maintain a clean and organized office and lab space during the program.
- Be familiar with and comply with the Office of Graduate Education and departmental requirements and regulations. Feel free to contact them if you have any questions.
- Attend and participate in weekly department seminars and thesis defense presentations.
- Write the thesis/dissertation in journal article format and submit manuscripts for publication before leaving OSU.
- Return departmental keys upon completion of the degree program.
- Ensure that all research data is properly archived in accordance with the expectations of the major advisor.

These rules apply to both on-campus and off-campus students.

8.2 Major Advisor Responsibilities

Major advisors are expected to:

- Responsibly advise and guide students in their graduate program development, coursework, and research, and in their development as professionals within their chosen discipline and sub-discipline.
- Assist new students by explaining departmental regulations and research facilities; introducing them to fellow graduate students, staff, and faculty; and using the Degree Completion Steps and Timeline found at the end of this hanbook.
- Provide budgetary support for supplies, services, and equipment needed for research.
- Guide students to develop programs of study consistent with the student's career goals and department and Office of Graduate Education requirements.
- Remain informed of student's progress and any challenges in research and coursework through regular meetings.
- Inform students if their performance is unsatisfactory, discuss solutions and consequences if poor performance continues and develop a plan for improvement.
- Assist student in seminar preparation and practice.
- Assist in thesis organization and editing to ensure that the written products are in good form for distribution to other committee members.
- Encourage students to participate in CSS and other departmental seminars and in regional, national, and international scientific meetings. Assist students in preparing their oral presentations and posters. Communicate this item orally and by email.
- Ensure that students function as an integral part of the research, teaching, and/or extension programs.
- Conduct an annual employment evaluation of all GRAs and submit a copy to the department's Graduate Program Coordinator (see Graduate Employee Evaluation Form). Annual evaluations of employee's job performance are required, see OSU-CGE Collective Bargaining Agreement Article 15, Section 1.
- Conduct an annual review of academic progress for graduate students and submit a copy to the department's Graduate Program Coordinator (Rachel Swindon) (see Annual Review Form of M.S. Graduate Students or Annual Review Form of Ph.D Graduate Students).

8.3 Department Responsibilities

Departmental administrative personnel are expected to:

- Provide office and thesis research space, facilities, and educational resources to graduate students as resources and opportunities permit.
- Encourage students to attend and present research at professional meetings by providing transportation funding and/or in deferring costs of such participation as resources and university policies permit.
- Ensure that the graduate policy and departmental standards are maintained.
- Assist in the solution of problems that arise during the student's graduate program.
- Seek graduate student and major advisor input on issues of concern.
- Ensure that annual reviews are conducted for all graduate students.
- Distribute an announcement of every MS or PhD defense to all CSS members. To this end, the student or the student's major professor will share a defense announcement, which includes the title, date, time, and location (and/or remote access info) of the defense, with the CSS Graduate Program Coordinator no later than 7 days prior to the intended date of the defense

9. GRADUATE LEARNING OUTCOMES

University **Graduate Learning Outcomes (GLO)** for doctoral and master's programs were proposed by the Graduate Council and approved by the Faculty Senate in 2011. The first three GLOs are from the Office of Graduate Education and the fourth is from CSS department.

University and Department GLOs for PhD programs state that the student shall:

(a) Produce and defend an original significant contribution to knowledge.
(b) Demonstrate mastery of subject material.
(c) Conduct scholarly activities in an ethical manner.
(d) Communicate effectively to a diverse group of people using appropriate traditional and emerging technological media.

University and Department GLOs for MS programs state that the student shall:

(a) Conduct research or produce some other form of creative work.
(b) Demonstrate mastery of subject material.
(c) Conduct scholarly and professional activities in an ethical manner.
(d) Communicate effectively to a diverse group of people using appropriate traditional and emerging technological media.

The assessment of all 4 learning outcomes is to be on-going, providing guidance for students as they work toward achieving required outcomes, and summative, determining satisfactory progress toward degree completion.

10. DEGREE COMPLETION STEPS – COURSES AND CREDIT REQUIREMENTS

The CSS handbook is periodically revised and updated to ensure compatibility with University rules and procedures but may lag behind eventual modifications at the University level. Advisors and Graduate students should therefore confirm that procedural information is consistent with the info published at https://graduate.oregonstate.edu/current-students

Doctoral students: https://graduate.oregonstate.edu/current-students/doctoral-students
Masters' Students: https://graduate.oregonstate.edu/current-students/masters-students

10.1 Accelerated Master's Platform (AMP)

The Accelerated Master's Platform allows current, highly motivated Crop and Soil Science undergraduate students to take graduate classes and apply those credits to their current undergraduate degree and transfer them to either the Crop Science or Soil Science master's program. Up to 22 graduate credits will count towards the bachelor's degree and transfer to the master's program, counting towards the 45 credits needed for a master's degree. This allows students to complete their master's program within as little as one year of completing their undergraduate degree.

Admissions requirements:

- Enrolled in the Crop and Soil Science undergraduate degree program
- Approval of the Crop Science or Soil Science AMP advisor.
- Agreement of a Crop Science or Soil Science graduate faculty member to serve as major professor.
- Have completed at least 105 credits, equivalent to junior standing.
- A minimum 3.25 grade point average for completed OSU undergraduate coursework.

The application process and timeline can be found on CSS AMP website. Enrollment to master's program is not automatic, all master's degree requirements apply to AMP participants.

10.2 Assembling the Graduate Committee

The graduate committee is the formal body that guides, mentors, and evaluates your graduate experience. Several steps in your graduate education require approval by the graduate committee, such as (i) approval of the program of study (PhD), (ii) the preliminary examinations for PhD students and (iii) the defense exam of your thesis (both MS and PhD degrees). It is the graduate student's privilege and duty to recruit faculty for service on their committee, in consultation with the major advisor.

Committee composition

- **Doctoral**: A minimum of five members of the Graduate Faculty, including two from the major department/program, one from each declared minor field, and a Graduate Council Representative, are required. The major professor is one of the two members representing the major department/program. The committee can be completed with graduate faculty from other programs who have been nominated to serve on doctoral committees for the student's program.
- **Master's with thesis and all MAIS degrees:** Four members of the graduate faculty with two in the major field and one in the minor field if a minor is included, and a Graduate Council representative. When a minor is not included, the fourth member may be from the graduate faculty at large. For MAIS degrees, one member of the graduate faculty from each of the three fields, and a Graduate Council Representative.
- **Master's non-thesis with final oral examination:** Three members of the graduate faculty-two in the major field and one in the minor field if a minor is included. When a minor is not included, the third member may be from the graduate faculty at large.

If a student (MS or PhD) declares a minor on their program of study, they are required by Office of Graduate Education to have at least one committee member who is an approved graduate faculty from the minor department. For example, if a soil science student declares a statistics minor, they will be required to have a committee member from the Statistics graduate faculty.

All thesis MS and PhD students are required to have a Graduate Council Representative (GCR) on their committees. It is the GCR's responsibility to represent the Office of Graduate Education, monitor the oral and thesis defenses to ensure rigor in these examinations, and to ensure that the student is treated fairly during the examination.

Students **must** generate a list of potential graduate representatives on the Office of Graduate Education's website: https://graduate.oregonstate.edu/current-students/graduate-committee. Consult with your major advisor before choosing a GCR. Individuals on the list are not obliged to be on your committee and may decline your invitation. You are not obligated to accept any graduate representative on the list. You may generate one GCR list per day. The GCR is not required to read your thesis or participate in questioning the candidate. However, many GCRs do read the thesis and participate in the defense examination.

Once the graduate committee has been formed, changes to the composition of a graduate committee should occur only under extenuating circumstances. The intent behind such changes should be to support otherwise qualified students to graduate on time. The student and the major advisor should collaborate closely to facilitate the change. CSS graduate committee members or Department Head can be involved in facilitating the conversation.

10.3 Graduate Committee Meetings

A) Formal or required meetings

Doctoral students will meet with their committee and obtain their committee's approval to:

1) Create a program of study
   - PhD students with a master's degree should hold this meeting before completing two terms.
   - PhD students without a master's degree must convene their committee before completing five terms.

2) Plan their preliminary examination, which must be passed by the end of fall term in the 3rd year in order for the student to remain in good standing in the PhD program, and
3) Conduct the final examination (defense)

The associated timelines and technical details are at https://graduate.oregonstate.edu/current-students/doctoral-students

MS students are, by university rules, required to meet with their committee for planning and conducting the final examination (defense).

However, the CSS department strongly encourages MS students to involve their committee in the development of their program of study, analogous to the requirement for PhD students. The respective meeting should be held no later than after the completion of 18 credits.

The associated timelines and technical details are at https://graduate.oregonstate.edu/current-students/masters-students

B) Informal committee meetings

By agreeing to serve on your committee faculty commit to an advisory role. This is a service offering that students are encouraged to use. To this end, informal meetings with individual committee members or even the entire committee may be useful and can be convened at any time. The frequency and subject of such meetings depends entirely on the initiative of the graduate student.

10.4 Developing the Program of Study

The program of study is the list of courses you intend to take to fulfill the requirements of your degree. You will develop it in collaboration with your major advisor and graduate committee. The Office of Graduate Education will review your program of study to ensure that it conforms to the general rules and regulations for your degree. You must file a "Petition for Change" each time your program changes. Construct a program of study that meets the minimum requirements for graduation and take as much additional coursework (including thesis and blanket courses) as you and your graduate committee see fit. Additional courses need not be listed on your program of study.

The program of study for PhD students must be approved by the full graduate committee in a formal meeting. The program of study for MS students only requires approval from their major advisor, however, MS students should engage the full committees in the development of the program. All study programs are approved and signed by the department head.

The composition of your program of study is governed by a number of rules and regulations. Program of study forms that includes a summary of these rules are available from the Office of Graduate Education: https://graduate.oregonstate.edu/current/program-study. The university requires that your program of study includes training on the responsible conduct of research. See below for information on how to meet this requirement.

A tentative outline for a "program of study meeting" could be:

Introduction: Present a brief verbal autobiography, including general background and educational experience, and short- and long-range professional goals. Present a projected timetable of graduate study and a tentative list of courses to be taken in the proposed program. If you have created a tentative thesis plan, share.

Discussion of Program: The committee and the student will plan a tentative course program. This plan considers the candidate's previous education, research area, goals, and interests. It is helpful if the following written information is provided to members of the graduate committee before the meeting:

- statement of student's professional goals and objectives.
- listing of undergraduate and graduate courses taken so far, including course names, numbers, credits, grades, and institutions.

- proposed list of courses to be taken
- tentative timetable for the graduate study plan. Base the timetable on the Degree Completion Steps and Timeline found at the end of this handbook

10.5 Declaring a Graduate Minor Degree

Declaration of a minor degree is not a requirement for graduate students in CSS. However, there is a multitude of graduate minor programs available at OSU, such as in robotics, artificial intelligence, statistics and other fields that may be of interest to a CSS graduate student. Students wishing to include a minor in their program of study must secure the agreement of a graduate faculty member from the department granting the graduate minor degree to serve as a "minor professor" on their graduate committee.

10.6 Seminar Presentations

Graduate students and faculty in Crop and Soil Science are **expected to attend the weekly departmental seminars unless they are travelling or attending class**. Students are expected to contribute to discussions and make presentations as determined by the Seminar Committee and in consultation with the major advisor. Student seminar presentations will undergo written evaluation by the faculty and students present. The major advisor will discuss the strengths and weaknesses of each seminar presentation with the students and develop a plan for improvements as needed.

Formal Student Seminar Requirements

- Master's students are required to present at least one seminar in addition to the thesis defense seminar. They must register for CROP/SOIL/ENT 507 during the term in which they present unless other arrangements are made. It is recommended by the department that the required seminar is a research-plan seminar during the spring term of the first year of study.
- Oral research presentation and/or Poster presentation at a professional meeting are encouraged.
- Doctoral students must present at least two seminars and are required to be enrolled in CROP/SOIL/ENT 607 during the terms in which these seminars are presented.
- The first seminar is a "research-plan" seminar, ideally presented in a spring seminar session.
- The second seminar must be presented at least six months prior to the dissertation defense. This requirement may be fulfilled by a departmental seminar presentation. Students can fulfill the requirement for the second seminar with an oral research presentation at a professional meeting as long as it is approved by the major advisor.
- MS or PhD students enrolled in the PBG option must give an additional seminar under the PBG 507/607 class designation. These seminars are organized by the PBG faculty.

Guidelines for Seminar Development and Presentation

- Seminars are opportunities to practice the competent delivery of professional outreach/dissemination products. Accordingly, presentations need to be well organized, logically structured, visually appealing and demonstrate subject mastery.
- The major advisor is expected to pre-review and edit their student's seminar products with sufficient time for the student to implement suggestions.
- Students should provide the seminar committee chair with a brief, written biographical sketch 72 hours before the seminar.
- Non-thesis seminars should be about 20 minutes in length, with 10 minutes for questions.
- Thesis defense seminars should be about 40 minutes, with 10 minutes for questions.

10.7 Required Courses

Crop Science and Soil Science Degrees

For these degrees coursework will be tailored by the major professor and the graduate committee for each student based on their research project and needs to meet the minimum number of credits required for their degree program. In addition, the Crop and Soil Science graduate program

requires the following courses

1. Grad 520 Research Ethics.
2. Crop/Soil 507/607 Graduate Seminar (variable credits). See section 10.6 for details.
3. CROP/SOIL/PBG/ENT 509/609. One term (3 credits) of a teaching activity is required.[1]
4. Graduate students are required to complete mandatory University trainings in a timely manner, staying in compliance with University policies.

Crop Science Degree with PBG Option

The Crop Science Graduate Program with a PBG option has requirements beyond those listed in 9.8. Specifically, the PBG option requires that you include 12 credits from the following list in your program of study:

(1) BDS 575. Comparative Genomics (4)
(2) CROP 590. Experimental Design in Agriculture (4)
(3) PBG 507. Seminar (1-2)
(4) PBG 513. Plant Genetic Engineering (3)
(5) PBG 519/HORT 519. Current Topics in Plant Breeding and Genetics (2)
(6) PBG 530. Plant Genetics (3)
(7) PBG 540 & PBG 542. Principals of Plant Tissue Culture (3) and Plant Tissue Culture Laboratory (1)
(8) PBG550. Plant Breeding (4)
(9) PBG 551. Breeding Clonal Crops (1)
(10) PBG 556. Crop Plant Domestication (2)
(11) PBG 557. Plants and Patents (2)
(12) PBG 620. Introduction to Molecular Markers (2)
(13) PBG 621. Genetic Mapping and Association (2)

Crop Science Degree with ENT Option

The Crop Science Graduate Program with an ENT option has requirements beyond those listed in 9.8. Specifically, the ENT option requires that you take 3 credits of ENT 503 Thesis and include 9 credits from the following list in your program of study:

(1) ENT 507. Seminar (1-2)
(2) ENT 599. Special Topics (credits vary)
(3) ENT 540. Issues in Insect Toxicology (3)
(4) IB 577. Aquatic Entomology (4)

10.8 Blanket Courses

Blanket-numbered courses provide course credit for the many activities that are part of your program but don't fit neatly into a traditional course structure. Blanket courses have a zero middle digit (e.g., 501-509 or 601-609). They may be repeated up to the maximum totals described for each degree program of study. Blanket courses in CSS include:

Research credits

- CROP/PBG/ENT/SOIL 501/601.

Thesis credits

- CROP/PBG/ENT/SOIL 503 for MS students
- CROP/PBG/ENT/SOIL 603 for PhD students.

[1] Does not apply to MS students who matriculated prior to Fall 2024 term

Reading and Conference

- CROP/PBG/ENT/SOIL 505.
- These credits are given for special coursework that does not have a formal course number.
- This can be a way to gain credit for reading and discussing the body of literature on a specific topic.

Seminar

- CROP/PBG/ENT/SOIL 507/607.
- See section, 10.7 “Required Courses”.

Teaching Practicum

- CROP/PBG/ENT/SOIL 509/609.Credit is awarded under this course number for effort in teaching activities.
- See section 10.7 “Required Courses”.

10.9 Teaching Experience

- Your committee, major advisor, or the supervisor of your teaching experience will determine an appropriate number of CROP/PBG/ENT/SOIL 509/609 credits to include on your official program of study.
- Typically, assisting in an assigned undergraduate course equates to 3 credits of CROP/PBG/ENT/SOIL 509/609.
- Given career plans, some students may enroll in additional CROP/PBG/ENT/SOIL 509/609 credits.
- Other possibilities for teaching experience include assisting in the presentation of an extension program, field day, or other event, provided the experience includes direct contact with students or stakeholders. These experiences shall include preparation and presentation of one or more lectures or extension programs. They may include significant leadership during labs and recitation sections. These activities are not eligible for CROP/PBG/ENT/SOIL 509/609 credits.

10.10 Responsible Conduct of Research

The Responsible Conduct of Research (RCR) Program at OSU has been designed to meet the requirements outlined in Section 7009 of the America COMPETES Act, which mandates training in the responsible conduct of research for all proposals. As a recipient of National Science Foundation (NSF) funding, OSU’s plan is designed to make available programs and materials that will increase the knowledge and facilitate the practice of responsible research, see website.
See OSU Research Office CITI requirement, Section 10.4 “Programs of Study.”

10.11 Thesis, Dissertation, or Research Project

Scientific research involves the application of the scientific method to generate information, the synthesis and analysis of that information, and the vetting the findings and analysis by peers. The MS and PhD programs are designed to give you practical training and experience in each of these elements. The publication of the thesis or dissertation is your contribution to the scientific literature. The work that you do in graduate school will have the greatest impact if it is peer-reviewed and made widely available to others.

Your thesis or dissertation will undergo peer review by your committee, and it will be available to anyone who seeks it. However, the process of writing a thesis or dissertation does not reflect the same rigor in review as that given to journal articles. Students are encouraged to write MS and PhD theses chapters in the form of stand-alone scientific journal articles, ready to submit to a journal.

The department recommends the scientific paper format because it provides professional writing experience, speeds publication of thesis results, and encourages organized

compartmentalization of thesis research planning into publishable segments. The department requires a literature review section in all theses. It also encourages the use of appendices for results of preliminary experiments and other data that do not fit the journal article chapters and may not be published elsewhere. Appendices make data available in raw form so that it can be used by other researchers in meta-analyses or other studies.

The Office of Graduate Education has compiled a useful guide for the preparation and formatting of the thesis in this website. See section 12.3 “Thesis Copies” in this document for departmental expectations about submission of bound thesis copies.

11. DEGREE REQUIREMENTS AND OUTCOMES

The general degree and credit requirements for all graduate programs can be found at https://catalog.oregonstate.edu/

a. All graduate programs must include a minimum of 50% graduate stand-alone courses.
b. The remaining credits may be the 500 component of 400/500 “slash” courses.
c. Training in the Responsible Conduct of Research detailed in Section 10.10.

11.1 MS Degree Requirements

- A minimum of 45 graduate credits is required. Of those 45 credits, CSS requires 12 thesis credits (Crop 503/Soil 503/PBG 503/ENT 503).
- No more than 50% of the credits are slash courses, i.e., 4xx/5xx.
- If a minor field is identified, approximately two-thirds of the coursework (30 credits) must be in the major and the rest in the minor field.
- No more than 9 credits of blanket-numbered courses (such as 507 or 509) may be applied toward the minimum 45-credit MS degree. This does not include required thesis hours (CROP/SOIL/PBG/ENT 503).
- Full-time students with GRA or GTA must register for a minimum of 12 credits during fall, winter and spring terms and 3 credits during the summer term.
- At least one credit of seminar (CROP/SOIL/PBG/ENT 507) is required for thesis and non-thesis MS students, and two seminar credits are required for the PBG option.
- Three teaching practicum credits (CROP/SOIL/PBG/ENT 509) are required.[2]
- Passing GRAD 520 (Responsible Conduct of Research).
- A maximum of 22 credits of graduate work completed at another accredited institution (https://registrar.oregonstate.edu/transfer-credits), may be transferred, provided that courses fit into the program of the degree and grades of A or B have been earned. The transfer credits should be approved by the student’s committee and by the Office of Graduate Education.
- Students must submit a Transfer Credit Request form before the end of their first year of study if they wish to include transferred courses within their course study program at OSU. Credit granted for work completed at another institution is tentative until validated by work in residence. Credit for out-of-state extension courses, correspondence courses, institute courses, certain distance education courses, and other non-traditional courses is not accepted. See the Graduate Catalog for a complete description of rules and procedures regarding transfer credits.
- Completion of an original research project and successful presentation and submitted thesis, or for the non-thesis option, completion of a research project and report.
- Pass the final thesis defense exam.
- Traditional thesis format or a different format that takes advantage of emerging technology systems is acceptable. Thesis should be accessible via Scholars Archive.

[2] Does not apply to MS students who matriculated prior to Fall 2024 term

- Thesis and non-thesis tracks are offered and subject to the approval of major advisor and graduate committee.
- All work for an MS degree must be completed within seven years, including transferred credits, coursework, thesis, and all examinations.

11.2 MS Non-Thesis (Project) Option

- Students must decide early in their course of study whether they wish to follow the thesis or non-thesis MS degree.
- The non-thesis option requires students to complete 45 credits, out of which a minimum of six research credits (Crop 501/Soil 501 /PBG 501 /Ent 501), in lieu of thesis credits, must be related to the research project. A Graduate Council Representative is not required in the graduate committee of non-thesis MS students.
- M.S. non-thesis degree students must write a minimum 3–4-page project proposal with assistance from their major professor, following the format listed below.
- The completed proposal should be reviewed by and receive signed approval from the student's major professor and two additional committee members.
- The proposal **must be approved at least three weeks prior to the anticipated start date of the project.** Failure to do so could jeopardize the entire experience and credit may not be awarded.
- The following items must be included in the project proposal:
  - Project Cover Sheet
  - **Proposal**
    - ***Project Description:*** describe in detail what you will be doing and how you will be doing it. If you will be conducting research, details about the overall project (including a description of the problem, project rationale, objectives, methodology, outcomes, and references) should be attached in the appendices. The body of the Project Description should focus on your activities.
    - ***Project Outcomes:*** explain what new skills and/or knowledge you will be acquiring through this project, and how this experience will move you forward along your career path. (Overall expected project outcomes should be included in the appendices.)
    - ***Evaluation Criteria:*** how will your major professor evaluate your performance? Identify project-specific parameters to be assessed.
  - Appendices: Include current resume or c.v. and additional overall project details
- The length of the final research report depends on the topic, methods, and final product as agreed on with the student, major professor, and committee. The project report has the potential to be released to the public. The project content must be well researched, reliable, and academically defensible.
- Write the M.S. Final Project Report using the general guidelines below:

  - Pretext Pages
    - Abstract Page
    - Title Page
    - Approval Page
    - Acknowledgements (optional)
    - Table of Contents
    - List of Figures
    - List of Tables
    - List of Appendices

- Scientific Report
  - Introduction
  - Materials and Methods
  - Results
  - Discussion
  - Summary and Conclusions
- References
- Appendices

11.3 PhD Degree Requirements

See the graduate catalog for the formal list of requirements: https://catalog.oregonstate.edu

- A total of 108 credits are required to be completed for the PhD degree.
- A minimum of 36 thesis/dissertation credits (Crop 603/Soil 603/PBG 603/Ent 603) are required.
- No more than 50% of the credits are slash courses, i.e., 4xx/5xx.
- A minimum of 36 credits must be completed in residence at Oregon State University.
- At least two credits of seminar credits (CROP/SOIL/PBG/ENT 607) are required, with three credits being required for the PBG option.
- One term of teaching, 3 credits (CROP/SOIL/PBG/ENT 609) is required, however, two terms of teaching are desired. PhD students in need of teaching credits should notify the Graduate Program Coordinator ahead of time to ensure CROP/SOIL/PBG/ENT 609 is part of the schedule of classes for the term envisioned. Teaching will be evaluated according to the evaluation form found at the end of this handbook. It is the advisor's responsibility to schedule the time for the teaching. Teaching is evaluated by the faculty of record for the course. A teaching evaluation form, along with the yearly academic progress evaluation form (at the end of this handbook), will be placed in the student's academic file. These files may be held by the advisor or by the departmental administrative personnel. This will ensure that the student has met the teaching requirement.
- No more than 15 blanket-numbered credits (e.g., 607) may be applied toward the minimum 108-credit doctoral program. This does not include required thesis/dissertation credits, i.e., Crop 603/ Soil 603/PBG 603/Ent 603.
- If a minor is declared, it must consist of at least 18 credits, or 15 credits for an integrated minor.
- Completion of an original research project.
- Passing GRAD 520 (Responsible Conduct of Research).
- Pass the preliminary written and oral exams.
- Pass the final defense thesis and successfully submit a PhD thesis.
- Traditional thesis format or a different format that takes advantage of emerging technology systems is acceptable. Thesis should be accessible via Scholars Archive.
- Students must submit a Transfer Credit Request form before the end of their first year of study if they wish to include transfer credits in their program of study at OSU. Students may transfer selected graduate credits if the OSU Office of Graduate Education approved them based on transfer credit guidelines and if the student's committee decides the courses are applicable to the proposed OSU program of study. See Policies Governing All Graduate Programs.
- Graduate courses to be transferred to a PhD program can be courses that were used to satisfy the graduate course requirements of a graduate certificate or a master's degree (or equivalent).

- Selected 700-level courses may be listed on doctoral programs of study if the courses are deemed equivalent to graduate-level learning and if the graduate committee approves.
- There is no limit on transfer credit toward the doctoral degree provided the doctoral residence requirement is satisfied.
- Credit granted for work completed at another institution is tentative until validated by work in residence. Credit for out-of-state extension courses, correspondence courses, institute courses, certain distance education courses, and other non-traditional courses are not acceptable. See the Graduate Catalog for a complete description of rules and procedures regarding transfer credits.

12. EXAMINATION REQUIREMENTS

In addition to the elements and requirements described above, your graduate program consists of formal examinations. The Office of Graduate Education largely prescribes the nature and timing of these examinations.

It is the MS and PhD student's responsibility to complete and submit the appropriate pre-examination Office of Graduate Education paperwork and to schedule the exam. Exam Scheduling Form. Students must be enrolled for a minimum of 3 credits during the terms in which they undertake departmental written and oral preliminary examinations.

12.1 MS Degree Examination Requirements

Master of Science (MS) degree candidates are not required to take a written examination; however, major advisors may use a written examination to prepare students for the oral examination or as another means of assessing student achievement, if agreeable with the student's graduate committee.

Final Oral Examination for the MS Student

- The thesis (for thesis students) or research paper (for non-thesis students), and the coursework examinations are combined into one examination for MS degree candidates. The candidate should expect to be examined on both parts, as required for the MS degree candidates Master's Students | Office of Graduate Education.
- The formal oral presentation by the candidate is open to the public and must be publicized. Following the public presentation, the oral examination is a closed session restricted to the candidate's graduate committee members. The student or the student's major professor will share a defense announcement, which includes the title, date, time, and location (and/or remote access info) of the defense, with the CSS Graduate Program Coordinator no later than 7 days prior to the intended date of the defense. The announcement will be distributed to all CSS members and other relevant departments.

12.2 PhD Degree Examination Requirements

PhD candidates are required to pass

- Preliminary examination, and
- Final (defense) examination.

The preliminary examination consists of:

- Written comprehensive examination, and
- Oral examination.

12.2.1 Preliminary Exam

A. Written research Examination[3]

- The graduate faculty requires that a student pass a written departmental examination before taking the oral preliminary examination for the PhD degree. The written examination tests the student's ability to integrate knowledge from different subject areas, to reason, and to apply principles to solutions of problems relating to crop science or soil science. It is typically taken towards the end of the second year of study.
- The student's major professor is responsible for arranging the comprehensive written part of the preliminary examination. The student's graduate committee members are responsible for creating the questions in the written examination. Questions on practical applications in agriculture such as information technology, artificial intelligence, robotics, and remote sensing can be included as appropriate.
- The content, length, timing, passing standard, and repeatability of this examination is at the discretion of the student's graduate committee. The examination will cover the main areas related to the discipline of each student.
- The authors of the questions must indicate which questions are open book or closed book and approximately how much time should be allotted to answer the questions (1-2 hours, typically, for each question). Open-book questions can be answered using text, library or web resources, if the student so desires.
- The answers will be returned by the major professor to the authors of the questions, who will indicate to the major professor whether the student passes their question(s). All questions should be evaluated within two weeks of the test date.
- If a student does not pass one or more sections of the examination, they will have one opportunity to be re-examined and successfully pass those sections. Additional coursework may be suggested by the graduate committee as a result of this examination, or the student may be encouraged to work towards an MS rather than PhD degree.
- All written examination answers will be provided to the student's graduate committee and will be considered in deciding whether the student passes the Oral Preliminary Qualifying Examination.

Suggested guidelines for written exam:

- Each member of the graduate committee prepares a set of questions (~ 2-4) related to the area of the student's study. The answer to each question should not exceed 4 pages.
- The written exam can be given over 4 days, in four 4-hour period, each member of the committee can have a designated day. The GCR does not participate in the written exam.
- Questions can be of an open book (student may consult any references available) or close book exam (questions have to be answered without external aids).
- Students may consult committee members for guidance on how to prepare for the written exam.
- The written preliminary examination can be retaken once, within one month of the first attempt, if the student fails to satisfactorily address one or more of the questions provided.

B. Oral Preliminary Examination

After passing the written examination, the PhD student will then take the oral preliminary examination within six months.

[3] Written exam requirement goes into effect Winter 2026 term for Crop Science PhD students. Crop Science PhD students who have passed their oral preliminary exams prior to Winter 2026 term are exempt from this requirement.

- The oral preliminary examination is intended to evaluate a PhD student's ability to utilize scientific literature, to think critically, to articulate ideas, and to demonstrate understanding and competence of general and specific fields of study.
- This examination is comprehensive and evaluates the student's general knowledge and ability to convey and discuss scientific ideas, theories, and techniques.
- The intent of the oral examination is to ensure that the student is adequately prepared to conduct the proposed research.
- According to the Office of Graduate Education (OGE), the preliminary oral examination should be scheduled for at least 2 hours.
- The examination will start with a presentation of the proposed research project (open to all interested individuals), not longer than one hour, followed by an examination by the graduate committee.
- It is the responsibility of the student to have the appropriate pre-examination paperwork of the Office of the Graduate Education completed and to schedule the exam.
- The major professor is responsible for providing the committee with a copy of the written exam and the student's exam results.
- If more than one negative vote is recorded by the examining committee, the candidate will have failed the oral exam. No more than two re-examinations are permitted. The oral prelim exam must be passed by the end of fall term in the 3rd year in order for the student to remain in good standing in the PhD program.

12.2.2 Final (Defense) Examination

- The purpose of the final examination is to assess the mastery of relevant subject material and knowledge, evaluate an original contribution to the field or research and creative work and assess the student's ability to conduct scholarly and professional activities in an ethical manner.
- It is the responsibility of the student to follow OSU Office of Graduate Education guidelines with regards to scheduling and pre-examination forms
- According to the Office of Graduate Education, this examination should be scheduled for a minimum of two hours.
- A minimum of one full academic term must pass between the preliminary oral examination and the final defense.
- The candidate's formal oral presentation is open to all interested people, not to exceed one hour. The student or the student's major professor will share a defense announcement, which includes the title, date, time, and location (and/or remote access info) of the defense, with the CSS Graduate Program Coordinator no later than 7 days prior to the intended date of the defense. The announcement will be distributed to all CSS members and other relevant departments.
- The examination of the candidate and final deliberation will be conducted solely by the graduate committee.
- The examination normally concentrates on the dissertation but can include questions outside of the dissertation topic.
- If more than one negative vote is recorded by the examining committee, the candidate will have failed the final exam. No more than two re-examinations are permitted.

12.3 Thesis/Dissertation Copies

The Office of Graduate Education does not require you to submit a paper copy of your thesis or dissertation but does have other filing requirements. See the Office of Graduate Education website for current requirements. Please note that if you miss deadlines, you may be required to register for minimal credits in the following term or may not obtain your degree in your desired timeframe. The department requires that you submit one copy of your thesis, bound at departmental expense, for

archival in the departmental Library. Talk with the office staff about where to have this work done. You may have two copies printed at no charge at the https://is.oregonstate.edu/sms/equipment-checkout located on the 2nd floor of the Valley Library. These copies are not suitable for departmental use.

13. KEEPING ON TRACK

13.1 Evaluation of Progress

Each year, you and your major advisor are required to evaluate your performance and progress towards your degree. This is a formal process beyond the routine communications you have with your major advisor. See Section 7 of this document. The annual evaluation is a structured method to receive feedback and constructive criticism. The evaluation process and record should point out strengths, successes, and areas for improvement. It is intended to contribute to your development as a scientist and a professional. This is an excellent opportunity for a comprehensive and reflective conversation with your major advisor about your program. It is also an opportunity to develop activities to enhance your program for the coming year. After the evaluation, your major advisor must complete the form and provide a copy to the graduate program coordinator and the department head by June 30 each year. After it is reviewed, the evaluation form will be placed in your graduate file.

Your satisfactory progress will be assessed against these metrics:

Graduate Committee

Select your graduate committee as follows:

- For PhD candidates, this should be accomplished before completing 5 quarters of study
- For MS candidates, before completing 2 quarters of study.

Annual Meetings

- It is recommended that both PhD and MS candidates hold annual meetings with their graduate committee and provide oral and written progress reports**.**
- The committee will discuss progress and determine whether it is satisfactory. If not, a remedial course of action will be outlined, and a follow-up meeting will be scheduled within 6 months.

Program of Study

- All graduate degree candidates must submit an approved, signed program of study form to the Office of Graduate Education.
- For PhD candidates with a master's degree, this should be done before completing two terms; PhD students without a master's degree must convene their committee before completing five terms; for MS candidates, before completing 18 hours of coursework

Research

Graduate degree candidates are expected to prepare a research proposal and initiate research under the direction of their major advisor within the same timelines of submitting the program of study form (PhD candidates with master's degree prior to end of 2nd term, PhD candidates without master's degree prior to the end of the 5th term, MS candidates before completing 18 hours of coursework).

Coursework

- PhD candidates are expected to satisfactorily complete required coursework within the first 3 years of enrollment. MS students are expected to satisfactorily complete required coursework within the first 2 years of enrollment.
- For satisfactory progress, all graduate students must maintain an overall grade-point

average (GPA) of *at minimum* 3.00 on a 4.00 scale.

- Courses for which a grade below 2.00 is received do not contribute to the graduate program of study.
- A minimum grade-point average of 3.00 is required before the final oral or written exam may be scheduled.

PhD Qualifying Exams

The written preliminary comprehensive examination and the preliminary oral examination must be passed by the end of the fall term in the third year in order for the student to remain in good academic standing in the PhD program.

Unsatisfactory Academic Performance Evaluation

- The annual academic assessment, conducted by the major advisor, may result in an unsatisfactory performance evaluation of the student. In cases of unsatisfactory performance, the major professor will work with the student to develop a written Graduate Student Performance Improvement Plan for improving the student's performance. The plan will become part of the student's file and will contain tangible mileposts or benchmarks for improvement. The Department Head will review and monitor progress of this plan on a quarterly basis. In cases where the Department Head is the student's major professor, this review will be conducted by the chair of the Departmental Graduate Program Committee. Two unsatisfactory performance reports may result in terminating the student's graduate program and dismissal.

Dismissal from Graduate School

- Advanced-degree students and graduate certificate (regularly, conditionally, and provisionally admitted) are expected to make satisfactory progress toward a specific academic degree or certificate. This includes maintaining a GPA of 3.00 or better for all courses taken as a graduate student and for courses included in the graduate program, meeting departmental or program requirements, and participating in a creative activity such as a thesis. If a student is failing to make satisfactory progress, as determined by the major department/program or the Graduate School, the student may be dismissed from the Graduate School. Any doctoral student who fails the preliminary oral examination, with a committee recommendation that the student's work toward this degree be terminated, may be dismissed from the Graduate School. Any student who fails a final oral examination may be dismissed from the Graduate School. Academic dishonesty and other violations of the Student Conduct Code may serve as grounds for dismissal from the Graduate School.

13.2 Graduate Program Degree Completion Steps and Timeline

There are separate degree completion steps and timeline guides for MS and PhD students provided at the end of this handbook. The Office of Graduate Education also provides a guide to track deadlines and milestones in your graduate study: https://graduate.oregonstate.edu/current-students#completion.

14. SCHOLARSHIPS AND AWARDS

14.1 Travel Awards

Attending and presenting at professional meetings are important aspects of academic life. The Department has several endowments that can provide funding for professional meetings and other travel. Award amount per meeting varies and is at the discretion of the Department Head. Submit your email of interest to Emmalie Goodwin and include the meeting dates and details. In your pre-approval request, indicate that you are also requesting a travel award and specify the type and purpose. Your major advisor or other funder will pay any additional costs. Follow Departmental travel procedures detailed in Section 15.6 below. The Office of Graduate Education also offers a Graduate Student Scholarly Presentation Award that can

be up to an additional $1,000/year for reimbursement of travel funds. More details can be found on the Office of Graduate Education website: https://graduate.oregonstate.edu/awards/scholarly-presentation-award.

14.2 Department Administered Scholarships for Continuing Students

The Department administers several annual scholarships that are available for continuing students in Crop Science and Soil Science graduate programs. Each scholarship has been funded by a different donor, and each has slightly different criteria.

Award amounts vary based on the wishes of the donors and the balances available. Application process and deadlines vary, see department scholarship website for information.

14.3 College of Agricultural Sciences

https://agsci.oregonstate.edu/academics/students/scholarships

14.4 Awards Administered by the Office of Graduate Education

The Office of Graduate Education administers several fellowships and scholarships that can be found here: https://graduate.oregonstate.edu/finance/graduate-fellowships-and-scholarships Some scholarships require nomination by the department. Speak to your major advisor early if you would like to be nominated for one of these awards.

14.5 The OSU Valley Library

The OSU Valley Library subscribes to Grant Forward, a database with extensive offerings for supporting research and education. https://www-grantforward-com.ezproxy.proxy.library.oregonstate.edu/index

14.6 External Scholarships

There are a number of scholarships available from external sources. The Office of Graduate Education has compiled a list of some of these here, and other exist: https://graduate.oregonstate.edu/awards

15. POLICIES, PROCEDURES, AND REGULATIONS

15.1 Use of State Vehicles

OSU maintains a fleet of vehicles for use for official business. See http://motorpool.oregonstate.edu/ to reserve a vehicle, and learn about rates, and regulations. Graduate students must request written permission to drive a state vehicle. The request is signed by your major advisor, or the faculty in charge of the program you are working with and submitted to Transportation Services at least three working days before the first time of travel.

- University policy requires that all drivers have a valid U.S. driver's license.
- International driver's licenses are not acceptable when driving state vehicles.
- Drivers reserving an 8 or 12 passenger van are required to watch https://transportation.oregonstate.edu/motorpool/van-safety and pass the test in addition to being an authorized driver.
- Drivers are responsible for following all university and state regulations pertaining to use and operation of state vehicles.
- State vehicles **may never** be used for personal purposes.
- Partners, children, or pets **may never** be transported in state vehicles.
- Contact Emmalie Goodwin for information about making reservations for rental cars.

15.2 Laboratory and Facilities Policy

- Authorized departmental personnel are provided with keys to appropriate labs and facilities. The major advisor authorizes key requests which are approved by the department

administrative manager or department head.

- Each room, lab, greenhouse section, and special facility has a designated faculty supervisor. Supervisors are responsible for coordinating and supervising the use of facilities for which they have responsibility. Present your request to use facilities, space, or equipment to the appropriate supervisor.
- All departmental facilities and equipment are the property of the University and the Department—not of individual project leaders or supervisors. The supervisor responsible of the program normally has scheduling priority over other departmental or cooperating department programs.
- Each research group must provide its own expendable supplies and chemicals, as well as the costs of such supplies used by others, and for repair costs resulting from unauthorized or negligent use of equipment. Consult with your project leader or major advisor about cost commitments for expendable supplies and shared equipment.
- All facility users are expected to respect and comply with established use policies. You must comply with check-out list policies, clean-up and glassware washing policies, equipment operation training requirements, and with the times assigned for use of facilities by the supervisor.
- Individuals who do not respect or comply with established procedures and policies may be denied use of facilities. Use-denial recommendations are made by facility supervisors and subject to approval by the department head.

15.3 Safety

Labs, research farms, greenhouses, and remote field sites have inherent dangers. If you work at any University laboratory, research and experiment station property, research farm, or greenhouse, **you are required to complete safety training before beginning work** and periodic refresher courses.

Some equipment and facilities may require additional training. Check with your supervisor on specific training needs.

If you are based at an off-campus facility, make sure to follow specific safety training requirements (e.g., Hermiston Ag. Res. and Ext. Center has its own modules).

Immediately alert your immediate supervisor, major advisor, or the OSU office of Environmental Health and Safety if you have safety concerns: http://oregonstate.edu/ehs/.

15.4 Copy Machine Use

The Department has copy machines in ALS 3017 and Crops 107. These are available for faculty and students to copy items related to teaching, research, and Extension projects.

Office staff have the priority to use the copiers. Personal copying is not allowed.

Personal activities for which you may *not* use the departmental copier:

- Materials as a part of your class assignment,
- Copying thesis material for distribution to committee members,
- Copying journal articles and other materials for the student's files, or
- Any items of a personal nature

Check with the office staff

- If you are unsure whether a copy job is personal or official business or
- If you do not have an assigned copier access code. Copy code activity is recorded and audited monthly.

The departmental copy machine is designed for low-volume copying. Copy jobs of multiple more

than 100 pages are sent to *Printing Services* (http://printmail.oregonstate.edu/). At Printing Services, costs are reduced as the number of copies increases. When preparing materials for meetings, programs, or large classes, plan ahead and use Printing Services.

Publicly owned resources are for official use only. The following guidelines apply to graduate student use of copiers:

Official activities for which you may use the departmental copier:

- Activities that contribute directly to the teaching, Extension, and research programs of the Department or University,
- Preparation of materials for class by a teaching assistant,
- Abstracts for distribution to seminar participants,
- Preparation of manuscripts for publication, even if included as a part of a student's thesis.

15.5 Poster Printing Policy and Procedure

When preparing posters for academic presentations, be sure to follow the current policies, outlined in detail at the IT Website https://support.roots.oregonstate.edu/roots/poster-printing

- Send an email to ROOTS Support one week or more in advance to advise them of your need for poster printing services.
- Submit your poster as a pdf file a minimum of three days in advance of the day needed.

Quick Tips for Posters

- The plotter paper is on a roll that is either 42 or 36 inches wide, make one dimension of your poster one of those two sizes.
- The plotter does not print to the edge of the paper; leave a one-inch margin around the poster content.

Other Poster Printing Options

- OSU Printing and Mailing Services (http://printmail.oregonstate.edu/) also can plot posters. Contact them for more information.
- Students can plot a limited number of free posters at the Student Multimedia Presentation Center. Contact them for more information: http://is.oregonstate.edu/academic-technology/sms.

15.6 Travel Policies and Procedures

For Travel help or questions contact Emmalie Goodwin-
Emmalie.goodwin@oregonstate.edu, 541-737-5093

University Travel and Expense System – Concur

Concur Login Link: Employees and Students can access Concur though their My Oregon State Dashboard. Just search for "concur" under the resources section.

Direct Login Link:
https://login.oregonstate.edu/idp/profile/SAML2/Unsolicited/SSO?providerId=https://us.api.concursolutions.com/saml2

Complete Your Profile: Before using Concur Travel and Expense for the first time, you should complete your profile by clicking the "Profile" link at the top left of the page, and then select Profile Settings. Please see our video library for help filling out your profile. Through your concur profile you can verify your email address, add your personal travel preferences, as well as update emergency contact information. An updated profile is critical and will really enhance your travel & expense experience.

Training and Support: There are various training materials available to help get up to speed on the new Concur Travel & Expense software. Please visit our training library to view training videos, process documents, or trip sheets. We will be continually adding content to our various libraries.

For general questions regarding Concur Travel & Expense please feel free to contact our team via travel@oregonstate.edu.

Concur Pre-Trip Requests
OSU employees and students need to submit pre-trip requests for their OSU sponsored domestic and international travel through Concur, except for in-state travel. The International Travel Registry (housed in Global Opportunities) should still be used for ALL international travel. This will ensure OSU students and employees are properly supported in case of emergency while traveling abroad. Work is currently underway aimed at reducing the complexity around pre-trip registration processes for International Travel, but the International Travel Registry remains a critical component.

Other Travel Information

- Be sure to consult your major advisor or the entity providing travel funds before planning travel and submitting reimbursement requests. Some funding sources may not reimburse meals and incidentals, or they may be reimbursed at a lower rate.
- Conference registrations and abstract submission fees can be charged to the department credit card. Send the information by email to Emmalie or ask her to come to your computer and complete the transaction.
- You must pay for hotels, taxis, and shuttles at your destination. Keep all receipts. Hotel rates are covered up to current per diem rates. You can check per diem rates online through: https://www.gsa.gov/travel/plan-book/per-diem-rates You will be reimbursed after you return.
- It is not necessary to keep meal receipts, as the University pays a flat daily rate for meals. https://www.gsa.gov/travel/plan-book/per-diem-rates
- If you are gone for 5 days or more, you are entitled to a travel advance: https://fa.oregonstate.edu/fiscal-policy-program/03-140-208-travel-advances

16. RESEARCH SUPPORT FACILITIES

16.1 On-campus

Please review the Laboratory and Facilities Policy, Section 15.2 of this document. As a graduate student, you have direct access to a number of shared facilities: http://research.oregonstate.edu/shared-research-facilities-and-services.

Much of the equipment and some of the services offered by these facilities are available at no charge for graduate student use or for a small fee to cover expendable supplies. However, the majority of services are fee-based, at a discounted rate to the OSU community. The campus facilities most commonly used by our students and program include the following:

Agricultural and Life Sciences Building (ALS), Crop Science (CS), Cordley Hall, and Seed Lab.

The department's main office is in 109 Crop Science and there is a department mailroom, kitchen and copier in ALS 3017. The Oregon IPM Center has offices and labs in Cordley Hall. Our Seed Laboratory is a fee-based laboratory to support Oregon's seed industry. Offices, teaching, and laboratory facilities are in all three buildings.

Greenhouses http://agsci.oregonstate.edu/greenhouse/

Two major greenhouse complexes on campus offer some 100,000 square feet total growing space

for teaching and research. They are the College of Ag Science East (located immediately west of Cordley Hall) and West Greenhouses (about 1 block west of 30th Street between Orchard Avenue and Campus Way).

All new users (graduate students, faculty, and staff) are required to complete an initial orientation and safety training **before starting work in the greenhouses**. Contact greenhouse staff to arrange this orientation and training: http://agsci.oregonstate.edu/greenhouse/about-us/staff.

Greenhouse space is allocated on a long-term basis to primary users through their departments. Primary users may make short-term assignments to secondary users. Users are responsible to the greenhouse manager to coordinate use or any modification of the facilities.

Research Farms http://agsci.oregonstate.edu/farmunit

Department faculty use three research farms:

- Hyslop Field Lab,
- Vegetable Farm, and
- Lewis Brown Farm.
- Off campus experimental stations may have their own rules and regulations.

Plantings and field laboratories at these locations are used in field plot research work. Graduate students provide written requests to use these farms for research purposes, with requests approved by their major advisor and the College of Agricultural Sciences Farm Committee. These written requests must be made in advance and include materials, methods, and timing. Contact Dan Curry: dan.curry@oregonstate.edu

Center for Quantitative Life Sciences (CQLS) 3021 Agriculture and Life Sciences Building https://cqls.oregonstate.edu/ CQLS provides services, technical expertise, collaborative functions, and shared-use equipment for molecular bioscience research at Oregon State University. The Core Labs are a fully staffed facility that serves as a focal point for the acquisition and development of new instrumentation and technologies. CQLS provides service in four areas:

- *Genomics*
- *Functional Genomics*
- *Biocomputing and Bioinformatics*
- *Imaging and Image Analysis*

CQLS provides shared instrumentation, including real-time PCR, scanners, robotics, and computational facilities for use by walk-in users.

CSS Soil Health Lab

The OSU Soil Health Laboratory, located in Room 3079 of the Agriculture and Life Sciences Building, is a fee-based research and teaching facility that supports OSU scientists, students, Extension professionals, and external clients. The lab offers a wide range of soil, plant tissue, and water testing services—from standard nutrient panels to advanced soil health assessments that include chemical, physical, and biological indicators such as microbial respiration, active carbon, microbial biomass, aggregate stability, and nitrogen mineralization. Additional services include plant nutrient analysis, inorganic water testing, and heavy metal screening. The lab serves as a hub for applied research, sustainable land management, and science-based decision-making in Oregon and beyond.

Graduate students interested in using the Soil Health Lab for research or training are encouraged to email Soil.Lab@oregonstate.edu to discuss opportunities. Students in the Crop and Soil Science (CSS) program can conduct their own analyses in the lab after receiving training from SHL staff and are eligible for a 20% discount on testing fees when working independently. This hands-on research experience is an excellent opportunity to gain applied lab skills while advancing thesis or dissertation work.

The OSU Seed Certification Service*;* 031 Crop Science Building http://seedcert.oregonstate.edu/

The OSU Seed Certification Service in the Department of Crop and Soil Science certifies seed

acreage across the state. Seed Certification faculty have a wealth of information about local, regional, national, and international seed certification policies and procedures.

The OSU Seed Lab; Seed Lab Building – Campus Way http://seedlab.oregonstate.edu/

The OSU Seed Lab in the Department of Crop and Soil Science tests hundreds of types of seeds. Seed Lab faculty and staff have a wealth of information about seed testing procedures from around the world. Their extensive seed testing facilities can be used for cooperative research work.

The OSU Herbarium*;* 2082 Cordley Hall https://bpp.oregonstate.edu/herbarium

The herbarium is the world's most comprehensive collection of Oregon plants and fungi, with over 400,000 preserved specimens. Some identification services are provided, and voucher specimens are accepted from OSU research projects.

The Oregon State Arthropod Collection*;* 3029 Cordley Hall https://osac.oregonstate.edu/

A research collection of nearly 3 million preserved insect specimens. The collection is among the largest of university-owned insect collections in the country. It is the largest insect collection in the Pacific Northwest.

Research Office*;* A312 Kerr Administration Building http://oregonstate.edu/research/

Students and faculty can obtain information about grants, fellowships, etc., from the Research Office. The College regularly notifies via e-mail and provides pertinent information to faculty about upcoming grant and fellowship opportunities.

Statistics Consulting Services*;* 44 Kidder http://stat.oregonstate.edu/content/consulting-services
The Statistical Consulting Laboratory in the Department of Statistics offers consultation services to University researchers engaged in:

- design of studies and experiments (including proposal preparation)
- statistical and graphical analysis of data
- appropriate choice, application, and presentation of statistical methods

Researchers are strongly encouraged to interact with a consultant during the planning stage. For graduate students at OSU, the Statistics Student Consulting Service provides free statistical advice on University-related research projects. OSU faculty may also submit consulting requests to the Statistics Student Consulting Service, or they may directly contact the manager of the Statistical Consulting Lab at 541-737-1984. Fee-based consulting can be arranged.

16.2 Off-Campus

Off-campus facilities and resources available to graduate students include the following:

H. J. Andrews Experimental Forest

The mission of the H.J. Andrews Experimental Forest is to support research on forests, streams, and watersheds, and to foster strong collaboration among ecosystem science, education, natural resource management, and the humanities. Located in the western Cascade Mountains of Oregon, the Forest is administered cooperatively by the USDA Forest Service's Pacific Northwest Research Station, Oregon State University, and the Willamette National Forest. The site is a charter member of the National Science Foundation's Long-Term Ecological Research Program. Through the 1970s, the site was part of the International Biological Program-Coniferous Forest Biome (IBP-CFB), and in 1976 it was designated a Biosphere Reserve as part of the United Nations' Man and the Biosphere Program. In 1948, the site was established as an Experimental Forest by the US Forest Service.

Branch Experiment Stations

As the state's land grant institution, Oregon State University has a system of eleven branch agricultural experiment stations (AES) serving the research needs of the state's diverse agricultural and marine enterprises. The OSU AES faculty and staff work with CSS-related research, extension, and teaching programs. Many of the faculty based at the stations are graduate faculty and can

participate in graduate committee activities. Graduate students are encouraged to visit these locations to identify research endeavors, view the research plots and learn about the applied research activities of the crop, soil, and forestry industries specific to the regions of their locations. For the location and focus of each of the branch experiment stations, visit: http://agsci.oregonstate.edu/research/oregon-agricultural-experiment-station/oaes-branch- stations

National Clonal Germplasm Repository, Corvallis

http://www.ars.usda.gov/main/site_main.htm?modecode=53-58-15-00

This US Department of Agriculture (USDA), Agricultural Research Service (ARS) facility is part of the National Plant Germplasm System. It is adjacent to the Lewis Brown research farm on Peoria Rd. Corvallis, OR. This unit collects, maintains, evaluates, and distributes clonally propagated pear, hazelnut, hardy kiwifruit, berries, and other minor specialty crops. The facility houses four scientists: a small fruit curator, a plant pathologist in charge of *in vitro* culture and Cryo-preservation, a pear curator, and a molecular geneticist in charge of DNA technology.

***USDA- ARS-National Forage Seed Research Lab,* Campus Way**

http://www.ars.usda.gov/main/site_main.htm?modecode=53-58-05-00

The mission of the Forage Seed and Cereal Research Unit is to improve the profitability of forage seed, cereal, hop, and shellfish production systems in the Pacific Northwest in a manner that meets the environmental expectations of society. Forage Seed Lab scientists cooperate extensively with CSS faculty and has specialized facilities to support cooperative projects.

***USDA- ARS-Plant Materials Center,* Hyslop Field Station**

http://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/west/orpmc/

The Corvallis Plant Materials Center provides plant solutions for northwestern California, western Oregon, and western Washington. Heavily forested coastal terraces, steep mountains, grasslands, foothills, valleys, flood plains, woodland prairies, and savanna vegetation in the Willamette Valley and Puget lowlands typify the topography and natural vegetation they study.

17. LIFE BALANCE

Your research can be so engaging and fulfilling that it is easy to devote nearly all your time to it. Learning how to maintain productivity by appropriate activities to recharge and regenerate your energies is an important element of ensuring continued success. Consult the OSU Calendar to identify respective activities (http://calendar.oregonstate.edu/). Starting points can be the pages of the Memorial Union, https://mu.oregonstate.edu/directory, or any of the numerous other events, lectures, and exhibitions, that are taking place on campus;

Dixon Recreation Center

Sports Clubs

Oregon's natural beauty

volunteer for university or community programs

The various demands of graduate school can also cause stress, anxiety, and more serious and debilitating mental illnesses. The University offers several resources to help. A good place to start is Counseling and Psychological Services (CAPS): https://counseling.oregonstate.edu/. CAPS offers after-hours crisis counseling. The University is committed to supporting the success of all students; there is no stigma in requesting services, and your participation can be confidential. **To access a counselor anytime call their main number: 541-737-2131.** CAPS is also home to the Mind Spa, a unique sanctuary where you can soothe your mind, body, and spirit: https://counseling.oregonstate.edu/mind-spa.

Oregon State University

Department of Crop and Soil Science

Degree Completion Steps and Timeline - MS Students

Degree Completion Steps	Deadlines
Recommended Timing: **Year 1**	
Choose committee members and declare major field of study and minor and/or option, if desired	Before the completion of 18 credits of graduate course work
Develop research plan and course schedule, in conjunction with major advisor	
Hold first committee meeting	
Select Graduate Council Representative for your committee using GCR Generator Tool (not required for non-thesis)	
Submit Program of Study to the Office of Graduate Education	
Non-thesis only – Submit project proposal	At least 3 weeks prior to anticipated start date of project
Complete GRAD 520 Research Ethics	Before final oral exam
Present research-plan seminar	Recommended - spring term of first year of study
Transfer credit request (if applicable)	Before the end of your first year of study
Recommended Timing: **Year 2**	
Complete Teaching Practicum	Before final defense
PBG Option Only - Present second seminar	Before final defense
Complete required coursework	Before final defense
Schedule final oral exam with Office of Graduate Education	At least two weeks before the desired final oral exam date
Apply for Graduation	At the start of the term you plan to graduate, or sooner if you are participating in commencement.
Distribute a copy of your thesis to your committee and email the pretext pages of your thesis to the office of graduate education.	At least two weeks before final oral exam
Successfully complete your final exam.	
Complete your edits and upload your thesis to ScholarsArchive.	Within six weeks of your final oral exam. **Note:** • To graduate in the same term as your final exam: upload by the last day of the term. • To graduate in the following term without having to register, upload before the first day of the following term.
Schedule exit interview with Department Head	Within four weeks of your final exam

Oregon State University

Department of Crop and Soil Science

Annual Review Form MS Graduate Students

Name of Graduate Student: _____

Name of Major Advisor: _____

Degree Program: _____ **MS Thesis**: _____ **MS Non-thesis:** ____

Program Start Date: _____ **Expected Completion Date:** _____

Date of Evaluation: _____

Activity	**Circle one**				**Date**
Coursework	Completed	Scheduled	Anticipated	N/A	
Program Committee Meeting	Completed	Scheduled	Anticipated	N/A	
Official Program Approval	Completed	Scheduled	Anticipated	N/A	
Thesis/Non-thesis Topic Seminar	Completed	Scheduled	Anticipated	N/A	
Teaching requirement	Completed	Scheduled	Anticipated	N/A	
Ethics course/training	Completed	Scheduled	Anticipated	N/A	
Thesis submitted to Grad Comm.	Completed	Scheduled	Anticipated	N/A	
Oral Exam/Thesis Defense	Completed	Scheduled	Anticipated	N/A	

Progress made in Thesis or Project:

Goals for the Upcoming Year:

Assessment of Progress (To be filled out by the major professor)

Major professor(s): Please discuss your responses with your student.

Question	Yes	No
Student is making satisfactory progress in completing his/her course work.		
Student is making satisfactory progress in research		
Student is making satisfactory progress in writing of his/her thesis.		
Student has participated in professional and/or career development opportunities.		

If 'No' has been checked for any of the questions, you must attach a written summary of indicators the reasons that led to this conclusion and an academic performance improvement plan (performance improvement plan template).

When a student receives an unsatisfactory review the major professor, in consultation with the student, develops a performance improvement plan.

Graduate Student's Endorsement: I have completed an annual review with my major advisor and understand my major professor's assessment of my progress (above) and that I have the right to discuss this evaluation with the department head. Furthermore, I understand that I can attach any comments, explanations, and rebuttals to this review.

Graduate Student's Signature: _____ **Date**: _____

Major Professor's Endorsement: I certify that I completed the evaluation form with the graduate student

Major Professor Signature _____ **Date:** _____

Oregon State University

Department of Crop and Soil Science

Degree Completion Steps and Timeline - PhD Students

Degree Completion Steps	Deadlines
Recommended Timing: **Year 1**	
Choose committee members and declare major field of study, and minor and/or option, if desired	• With master's degree - before the completion of two terms. • Without master's degree - before completing five terms.
Select Graduate Council Representative for your committee using GCR Generator Tool	
Develop research plan	
Hold preliminary committee meeting	
Submit Program of Study to the Office of Graduate Education	
Complete GRAD 520 Research Ethics	Before final oral exam
Present first research-plan seminar	Recommended - Spring term of first year of study (if Fall term start)
Complete transfer credit request (if applicable)	Before the end of first year of study
Recommended Timing: **Year 2**	
Complete Teaching Practicum	Before final defense
Complete Written Research Examination	Must be taken before the end of fall term in the third year.
Complete Oral Prelim Exam	Must be taken before the end of fall term in the third year and within six months of passing written exam
Recommended Timing: **Years 3-4**	
Present second seminar	At least six months prior to final defense
PBG Option Only - Present third seminar	Before final defense
Complete required coursework	Before final defense
Schedule final oral exam with Office of Graduate Education	At least two weeks before the desired final oral exam date
Apply for Graduation	At the start of the term you plan to graduate, or sooner if you are participating in commencement.
Distribute a copy of your thesis to your committee and email the pretext pages of your thesis to the office of graduate education.	At least two weeks before final oral exam
Successfully complete your final exam.	Typically within 3-4 years of start of program. Note: At least one term must elapse between the time of the preliminary oral examination and the final oral examination.
Complete your edits and upload your final dissertation to ScholarsArchive.	Within six weeks of your final oral exam. **Note:** • To graduate in the same term as your final exam: upload by the last day of the term. • To graduate in the following term without having to register, upload before the first day of the following term.
Schedule exit interview with Department Head	Within four weeks of your final exam

Oregon State University

Department of Crop and Soil Science

Annual Review Form Ph.D. Graduate Students

Name of Graduate Student: _____

Name of Major Advisor: _____

Degree Program: _____ **Program Start Date:** _____

Expected Completion Date: _____ **Date of Evaluation:**_____

Activity	**Circle one**				**Date**
Coursework	Completed	Scheduled	Anticipated	N/A	
Program Committee Meeting	Completed	Scheduled	Anticipated	N/A	
Program filed in Office of Grad Ed.	Completed	Scheduled	Anticipated	N/A	
Written Prelim. Exam	Completed	Scheduled	Anticipated	N/A	
Oral Prelim. Exam	Completed	Scheduled	Anticipated	N/A	
Teaching requirement	Completed	Scheduled	Anticipated	N/A	
First Seminar	Completed	Scheduled	Anticipated	N/A	
Second Seminar	Completed	Scheduled	Anticipated	N/A	
Ethics course/training	Completed	Scheduled	Anticipated	N/A	
Thesis submitted to Grad Comm.	Completed	Scheduled	Anticipated	N/A	
Oral Exam/Thesis Defense	Completed	Scheduled	Anticipated	N/A	

Progress made in Thesis Project:

Goals for the Upcoming Year:

Assessment of Progress (To be filled out by the major professor)

Major professor(s): Please discuss your responses with your student.

Question	Yes	No
Student is making satisfactory progress in completing his/her course work.		
Student is making satisfactory progress in research		
Student is making satisfactory progress in writing of his/her thesis.		
Student has participated in professional and/or career development opportunities.		

If 'No' has been checked for any of the questions, you must attach a written summary of indicators the reasons that led to this conclusion and an academic performance improvement plan (performance improvement plan template).

When a student receives an unsatisfactory review the major professor, in consultation with the student, develops a performance improvement plan.

Graduate Student's Endorsement: I have completed an annual review with my major advisor and understand that I have the right to discuss this evaluation with the department head. Furthermore, I understand that I can attach any comments, explanations, and rebuttals to this review.

Graduate Student's Signature: _____ **Date:** _____

Major Professor's Endorsement: I certify that I completed the evaluation form with the graduate student.

Major Professor Signature: _____ **Date:** _____

Oregon State University

Department of Crop and Soil Science

M.S. Non-Thesis Project Proposal Cover Sheet

Name of Student:_____ **Student ID Number:**_____

Project Title:_____

Major Professor: _____

Committee Member: _____

Committee Member: _____

Students must decide early in their course of study whether they wish to follow the thesis or non-thesis MS degree. M.S. non-thesis degree students must write a minimum 3–4-page project proposal with assistance from their major professor, following the format listed below. The completed proposal should be reviewed by and receive signed approval from the student's major professor and two additional committee members. The proposal must be approved at least three weeks prior to the anticipated start date of the project. Failure to do so could jeopardize the entire experience and credit may not be awarded. To evaluate the proposal in a timely manner and to allow time for the student to respond to comments, the following schedule should be followed:

a. Proposal submitted to committee: Date:

b. Committee members vote to approve the proposal. If the proposal is not approved by two or more members of the committee, the student has 14 days to submit a revised proposal.

Vote for the original proposal: _____ **Pass** _____ **No Pass**

Vote for the revised proposal: _____ **Pass** _____ **No Pass**

Committee Member's Signatures

I have read the attached proposal and approve of the project as described.

Major Professor Signature: _____

Committee Member Signature: _____

Committee Member Signature: _____

Comments (attached additional pages if necessary):

Oregon State University

Department of Crop and Soil Sciences

Assessment Form of Graduate Learning Outcomes (GLO) for MS/PhD Students for MS thesis defense, PhD preliminary, and final examination

(To be filled by the graduate committee after completing the prelim exam or MS/PhD thesis defense)

Student's name: _____ **Date**: _____ **MS or Ph.D.** ____

Graduate committee member name: _____

Thesis Title: _____

Check one: Prelim exam: _____ **Defense:** _____ **M.S. exam:** _____

For each learning outcome below, please choose the score which best reflects the student's level: *Meet expectation, exceed expectation, and does not meet expectation.*

Learning Outcome	Meet	Exceed	Does not meet
1. Knowledge of Field. Demonstrated adequate depth of knowledge associated with the discipline.			
2. Research ability. Appropriately designs, conducts, analyzes, and interprets research effectively and ethically in the discipline.			
a. Reviews the literature demonstrated knowledge of previous & current research in the field of study.			
b. Defining the Problem. Identified questions of his/her research.			
c. Methodology and Data Collection. Designed and implemented appropriate research experiments to test the hypothesis and solve problem.			
d. Data Analysis and Interpretation. Analyzed and interpreted research data appropriately.			
e. Conclusions and Recommendations. Presented conclusions and recommendations that are accurate, linked to data presented.			
3. Application. Demonstrated potential ability to apply research findings to lab and/or field settings in actual situations. Ability to make original/significant contribution to the discipline.			
4. Communication. Communicated effectively to a diverse group of people with various methods.			

Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.

Rubrics

1. Knowledge of field - associated with the student's discipline.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Clearly understood most the concepts associated with the discipline & the challenges & embedded issues. Demonstrated accurate language, definitions, and terms appropriate to the audience. Demonstrated appropriate depth of knowledge associated with the discipline.	Understood the key concepts associated with the discipline. Use of technical language, definitions, and terms accurately and appropriately. Demonstrated appropriate knowledge associated with the discipline, but lacks depth	Does not understand, or minimal understanding of the key concepts, challenges or issues associated with the discipline. Misused technical terms and concepts or relies on layperson's language. Demonstrated limited depth of knowledge associated with the discipline.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

2. Research Ability: Designs, conducts, analyzes, and interprets research data related to their discipline.

2a. Literature - Search, Selection & Review.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Uses appropriate, relevant, good number and current sources/references. Evaluated all or most sources for quality, relevance, and currency. Identified gaps in the literature. Good knowledge of previous and current research in their discipline.	Uses moderate numbers of references that cover the research subject. Some sources may be irrelevant, out of date, or do not address key area(s) of the research. Evaluates sources minimally for quality, relevance, and currency Identify some gaps in previous and/or current references in their discipline.	Minimal or no evidence of search, or evaluation skills. No evaluation of info sources is present. Does not identify info gaps in references. Limited knowledge of previous or current research in their discipline.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

2b. Defining the Problem.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Identifies a focused, unique, original problem that is challenging and well defined. Potential for significant contribution to the research/body of science in their discipline.	Identifies a somewhat focused problem but not particularly challenging or is simplistic. OR the problem is not well defined. Limited potential contribution to the research/body of science in their discipline.	The problem, if identified, is confused or simplistic. Contribution to the research/body of science in their discipline is not clear.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

2c. Methodology.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Approach and methodology are complete, appropriate for the problem. Has knowledge of emerging methodologies in their discipline. Data collected and presented demonstrated a clear understanding of the problem/research. Data presented, graphs and tables are complete, accurate, relevant, and contain appropriate headings, descriptors, and significant figures. Used appropriate statistics and Interpretations; presentations are accurate.	Approach and methodology are related to, but do not fully address the problems or uses inappropriate approach. Has limited knowledge of emerging methodologies in their discipline. Data collected and presented adequately. Relationship of the data to the problem are not entirely clear. Data presented are generally appropriate-Graphs and/or tables contain relevant headings, but some details may be missing or unclear, such as units and figures. Statistical analysis is generally understood and interpreted correctly.	Poor/inappropriate methodology related to the research. Has no knowledge of emerging methodologies in their discipline. Limited data collected demonstrate little attention to or understanding of the problem. Data presentation are incomplete, poorly labeled, confusing, or missing all together.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

2d. Data Analysis and Interpretation.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Use and interpretation of data are accurate and thorough, including data in graphs and tables, as well as the overall results and conclusions. Logical and highly insightful inferences from the info presented. Excellent job in integrating literature and data in creative ways. Analysis demonstrates firm understanding of data. Data are discussed appropriately in detail.	Accurately uses interpretation, including data in graphs and tables, results, and conclusions. One or more minor points may be overlooked or misinterpreted. Generally, makes logical inferences, with few or minor mistakes. Demonstrates a basic understanding of the data and some ability to connect literature and data, but analysis is confusing in some spots or contains inaccuracies.	Little or no interpretation of data, and/or ideas found elsewhere. Misunderstands or misrepresents info given in their sources. Limited or no logical inferences from the info presented. Does not appear to understand the data/info.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

2e. Conclusions and Recommendations.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Conclusions are accurate, appropriate, and clearly linked to problems and data presented. Conclusions and recommendations are balanced. Students consider uncertainties in the data or other limitations of the conclusions.	Conclusions are reasonable but may not take into account all critical factors. In a limited way, students consider uncertainties or other limitations of the conclusions.	Conclusions are inaccurate and/or unreasonable, do not reflect the data presented, or are merely a simplistic summary not tied to the original problem. Conclusions and recommendations do not reflect the research data.

3. **Application -** Demonstrates potential ability to apply research findings in real situations and make original/significant contribution to their discipline.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Research demonstrated excellent potential for original contribution to their discipline. Research is unique, well organized, complete, and statistically sound. Research prepares student for further productive research beyond graduate school.	Research demonstrated some potential for original contribution to their discipline. Research is unique but contains flaws in interpretation, organization, and/or statistics. Research prepares student for limited research beyond graduate school	Research contains serious flaws that would make it unpublishable. Not unique. Limited or no potential for student to do further research in this area.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

4. **Communication:** communicate effectively to a diverse group of people using appropriate traditional and emerging technological media.

Exceed Expectation	Meet Expectation	Does not Meet Expectation
Captures and communicates the intended idea(s) accurately and clearly. Main points connect with the audience and are smoothly tied together. Compellingly conveys why the issue matters. Visuals (graphs, tables, diagrams) are clear, concise, and relevant. Polished, error-free, and engaging. Professional.	Captures and communicates the intended idea(s) accurately, but parts are not clear. Generally easy to identify main points and transitions are usually smooth. Background and context sufficient to indicate the issue is important. Visuals (graphs, tables, diagrams) generally support the written component, but some overly complex, or redundant. Contains errors, but errors do not distract from or misrepresent content and ideas.	Inadequately/inaccurately captures and communicates the intended idea(s). Difficult to identify main points. Transitions may be rough. Limited background info and context so not at all clear why issue matters. Not clear how the visuals (graphs, tables, diagrams) add credibility to the topic. Multiple errors in grammar, syntax, punctuation, etc., that obscure and/or misrepresents the content.
Comments: Program-Level Target: Meet Expectation for M.S. and Ph.D. students.		

Graduate Employee Evaluation

The supervising faculty member will complete a written evaluation of the Graduate Assistant's work and review it with the Graduate Assistant.

Position Information

Employee Name:			
Department: Crop and Soil Science			
Supervisor Name:			
Evaluation Period:			
Date of Evaluation:			
Supervisor has confirmed with academic home or major professor that the Graduate Employee qualifies for employment *(satisfactory academic standing)*: **Yes ☐ No ☐**			
Position Number	**Appt % (FTE)**	**Appt Basis (term: 9 mo. or 12 mo.)**	**Job Location**
C60128			

Position Duties *(refer to position description)*:

Overall Evaluation:

☐ **Exceeds Expectations**	☐ **Meets Expectations**	☐ **Does NOT Meet Expectations**

Comments: The supervisor provides comments substantiating the overall performance rating. If there are areas in which the Graduate Assistant is expected to improve his/her performance, they should be noted in this section. If the Graduate Assistant does not meet or exceed expectations outline the areas in which the Graduate Assistant is expected to improve performance. * (see below for examples)

Job Knowledge/Technical Competence: Possesses and demonstrates technical, general or other specific knowledge and skills required to perform job duties and accomplish stated objectives.

☐ **Exceeds Expectations**	☐ **Meets Expectations**	☐ **Does NOT Meet Expectations**

Quality of Work: Demonstrates a commitment to providing quality work. Work performed is of high standard. Is not satisfied with producing work that is "just good enough."

☐ **Exceeds Expectations**	☐ **Meets Expectations**	☐ **Does NOT Meet Expectations**

Working Relationships and Communication: Establishes and maintains cooperative working relationships with co-workers and supervisor. Responds actively and effectively to needs of undergraduate students and colleagues. Respects abilities, decisions and motives of co-workers, internal stakeholders and partners. Speaks and acts ethically, fairly and consistently. Practices timely concise and relevant communication.

☐ **Exceeds Expectations**	☐ **Meets Expectations**	☐ **Does NOT Meet Expectations**

Interest and Initiative: Displays enthusiasm, dedication and interest in duties and responsibilities. Is a self-starter and proactive in approach to job. Demonstrates willingness to work beyond the usual or ordinary requirements of job when needed. Shows initiative and flexibility in meeting challenges. Capable of acting independently when circumstances warrant.

☐ **Exceeds Expectations**	☐ **Meets Expectations**	☐ **Does NOT Meet Expectations**

Judgement: Demonstrates ability to analyze available data or circumstances, consider alternatives, and make well-reasoned, timely decisions that favorably affect performance and organizational goals. Acts reliably and responsibly, keeping supervisor informed and aware of potential issues or areas that need attention.

☐ **Exceeds Expectations**	☐ **Meets Expectations**	☐ **Does NOT Meet Expectations**

Comments optional:

Goals for next evaluation period (optional):

Signatures: Employee signature confirms ***receipt*** of the evaluation. Graduate Assistants may submit a written rebuttal for inclusion into the personnel record with 30 days of receipt of the evaluation (Art. 15, Sec. 4).

Employee Signature	Date	Supervisor Signature	Date

Example Comments:

A. Overall exceeds the general responsibilities outlined in the position description.

B. Meets the general responsibilities outlined in the position description, but [Supervisor] would like to see more self-started initiative related to finding ways to improve the [research tasks/teaching assignments].

C. Attitude towards responsibilities laid out in the position description is not congruent with the expectations of a graduate level appointment.

D. [Supervisor] is committed to exploring mechanisms for creating a valuable and manageable experience for [name] and the department.

Academic Performance Improvement Plan

Date: [Date]

Student: [Student name]

Major Professor: [Major professor name and title, or program director if no major professor]

1. Specific deficiencies

a. GPA has been below 3.0 in winter 2024 and spring 2024
b. Winter 2024: F in XX 540, C- in XX 565
c. Spring 2024: D+ in XX 612
d. Not found a major professor/lab to join

Given these deficiencies per the guidelines established in the [Major] program's Student Handbook https://cropandsoil.oregonstate.edu/cropandsoil/graduate/graduate-student-handbook, the [Major] program has determined that you are not making satisfactory academic progress.

2. Plan to address deficiencies

a. Retake and successfully complete XX 540 and XX 565 in fall 2024 with grades of C or better and achieve a 3.0 or better term GPA in fall.
b. Find a mentor for an additional rotation by Sept. 24 (the rotation will be completed in the fall 2024 term).
c. Meet with instructors to discuss questions and obtain regular updates on progress for non-seminar courses. Meet with each instructor in the first week of class to discuss course structure and resources, then in the 4th and 6th weeks for updates. Attend office hours to ask questions that arise in class or during studying. Schedule meetings with the program director as needed (along with the updates listed in section 3).
d. Develop better study strategies. Use of the resources listed in section 4 is strongly encouraged.
e. Find a major professor by the end of the fall 2024 term.

3. Timeline

Week (Fall 2024)	Action(s)
Week 1	• Meet with instructors to discuss classes this term • Inform the program director about rotation plans (including the mentor and rotation schedule). Be sure to include the mentor in this communication.
Week 4	• Meet with instructors for early feedback on class performance
Week 5	• Update the program director on class performance based on meetings with instructors
Week 6	• Obtain grade feedback from instructors and discuss progress
Week 7	• Update the program director on class performance based on meetings with instructors
Week 9	• Discussion of progress with the program director
End of fall term 2024	• Meet with the program director to discuss final fall term grades • Share written confirmation from new major professor serving in that role, and finalize plans for joining their lab

4. Consequences if deficiencies are not rectified in the specified timeline

If expectations listed in this plan are not achieved by the end of the fall 2024 term, [Student] will be dismissed from the doctoral program in [Major].

Suggested Resources

In order to achieve optimal success, [Student] is strongly encouraged to continue to utilize resources including but not limited to Student Health Services, Counseling and Psychological Services, and the Graduate Writing Center.

Important Notes

If you achieve the expectations listed in this plan and remain in the program after fall 2024:

- You will need to retake and successfully complete XX 612 with a grade of C or better.
- You will need to raise your overall GPA to 3.0 or better by winter 2025, and maintain the overall GPA of 3.0 or better in each subsequent term until degree completion.

Failure to achieve these expectations will result in dismissal from the doctoral program in [Major].

5. Signatures

Student Signature	Date
Major Professor Signature	Date
School Head/Program Director Signature	Date

Pro tips:

- Be as specific as possible. For example, be clear if term GPA vs. overall GPA. Cite program handbook or graduate policies where applicable. Provide concrete deadlines, and a specific consequence should expectations not be met within those deadlines.
- Most plans allow 1-2 terms for students to demonstrate improved performance. If performance will be assessed at the end of each term of the plan, mention that. Subsequent plans may be issued as needed to foster continued improvement.
- Consequences are typically a dismissal from the graduate program. Consequences should not include a requirement to change to an alternate degree (e.g. PhD to MS). But, changing degrees may be discussed as an available option.
- University support resources may be encouraged but not required.