

# Botany and Plant Pathology Graduate Student Handbook (updated October 2024)

This handbook is intended to provide an introduction to the department and OSU and outline the requirements specific to the M.S. and Ph.D. degrees in Botany and Plant Pathology (BPP). Some of the information in this document may be found in further detail in the online "[Graduate Catalog](#)". Some information that is applicable to all University Graduate program can be found in the "[Graduate Academic Catalog](#)" and is not repeated here. The online "[OSU Graduate Student Success Guide](#)" is a resource from the Graduate School to aid students in adjusting and complying with OSU requirements.

Graduate students should obtain or review the following publications and resources:

1. Botany and Plant Pathology [Graduate Student Handbook](#) (this document)
2. [OSU Graduate Student Success Resources](#)
3. [The Oregon State University Graduate Academic Catalog](#)
4. [Graduate Student Thesis Guide](#)

## Department Administration

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Cheryl Hagey	Human Resources	2503 Cordley	7-5263	<a href="mailto:cheryl.hagey@oregonstate.edu">cheryl.hagey@oregonstate.edu</a>
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## Committee Chairs

Promotion & Tenure Executive	Jeff Chang	3607 Cordley	7-5278	<a href="mailto:jeff.chang@oregonstate.edu">jeff.chang@oregonstate.edu</a>
Graduate Studies	Jeff Anderson	3605 Cordley	7-4076	<a href="mailto:jeff.anderson@oregonstate.edu">jeff.anderson@oregonstate.edu</a>
Curriculum	Aaron Liston	4425 Cordley	7-5301	<a href="mailto:aaron.liston@oregonstate.edu">aaron.liston@oregonstate.edu</a>
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Greenhouse	Aymeric Goyer	3105 Cordley	7-7123	<a href="mailto:aymeric.goyer@oregonstate.edu">aymeric.goyer@oregonstate.edu</a>

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Extension & Outreach		Ken Frost	HAREC	541-567-6337	<a href="mailto:kenneth.frost@oregonstate.edu">kenneth.frost@oregonstate.edu</a>
Computing		Molly Megraw	3625 Cordley	7-1118	<a href="mailto:molly.megraw@oregonstate.edu">molly.megraw@oregonstate.edu</a>

**Department mailing address:**

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 2701 SW Campus Way  
 Oregon State University  
 Corvallis, OR 97331  
**Phone:** 541-737-3451

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**General Information**

The Department of Botany and Plant Pathology (BPP) consists of approximately 60 Faculty, 7 Instructors, 60 Postdocs, Faculty Research Associates, and Research Associates, 5 staff, 45 graduate students, 400 undergraduates, and 30 emeritus faculty. The faculty represents a broad spectrum of research and teaching interests and includes several scientists from federal and state agencies including the United States Department of Agriculture ARS, USDA Forest Service, US Geological Survey, Environmental Protection Agency, and the Oregon Department of Agriculture.

Except for the Federal labs and Branch Experiment Station locations, the department is housed in Cordley Hall. The departmental offices are in 2503 and the mailroom in 2605. The department office is open from 8:00 a.m. - 12:00 and 1:00 - 5:00 p.m., Monday through Friday. More information on BPP can be found on the departmental [website](#).

**When You Arrive**

Contact [Cheryl Hagey](#) in the front office to confirm that all employment paperwork has been completed. You will have a mailbox assigned to you in the mailroom (2605). Contact [Blaine Baker](#) regarding your office assignment and keys.

**Coalition of Graduate Employees**

The [Coalition of Graduate Employees \(CGE\)](#) represents the interests and rights of Oregon State University's graduate employees through the bargaining and maintenance of a fair working contract. They strive to create a community of graduate employees empowered to advocate for collective issues.

### **Registration**

The general catalog and schedule of classes are [online](#). Registration dates are available in the [Academic Calendar](#). All students should register online for all classes. New students should contact their major professor to help plan their class schedule and students should register as early as possible to ensure access to classes. If you have issues, contact the BPP Office Manager.

### **The Memorial Union (MU)**

The [Memorial Union](#) has the MU Lanes & Games, Griggs Center (Supporting Black and Indigenous Student Success), OSU ID Center, BeaverPrint, Amazon Locker, and US Bank. It also has several restaurants, a coffee shop, and a convenience store. You can also reserve spaces for meetings and events and there are numerous study tables distributed around the building.

### **OSU Beaver Store**

The [OSU Beaver Store](#) is located on SW 26th St and SW Washington Way. This is the place to purchase collegiate clothing, textbooks, supplies, etc.

### **Department and University Forms**

Contact Kimberly Callahan in the BPP main office for information regarding After Hour Permits, Email, and alias lists. Computer account request and authorization access can be completed [online](#). See Blaine Baker for office assignments and building access. See Catherine Mullins-Rodriguez for Driver's Authorization. If you need a form, or think you might need a form, contact Kimberly Callahan and she can direct to the correct form or resource.



## Life in Corvallis

### Housing

Housing in Corvallis is tight, and you should find a place as early as possible, well in advance of the beginning of the term. For complete information, check [Craigslist](#), the local newspaper (Corvallis Gazette-Times) and the University Housing Office (102 Buxton Hall). Options range from dorms to university-owned apartments, married-student housing, mobile home parks, rooming houses, apartments, or houses shared or single. If you don't have a place to stay when you arrive, contact a GSA officer who will find you a temporary place with another student while you are looking. Planning this is easier for everybody if you can let us know about your needs early.

### Utilities and Services

- [City of Corvallis Water Dept.](#), 501 SW Madison, Phone: 541-766-6949
- [Century Link](#) (phone, internet service): 1-800-475-4726
- [Comcast](#) (Phone, Cable, Internet Service) Phone: 1-888-824-8264
- [Pacific Power](#), 207 SW 6th Street, Phone: 1-888-221-7070
- [Consumers Power](#), Inc, 6990 SW West Hills Rd, Phone: 541-929-3124
- [Republic Services](#) (Waste disposal), 110 NE Walnut Blvd, Phone: 541-754-0444
- [Northwest Natural Gas](#), 1970 14th Ave SE, Albany, OR 9732, Phone: 1-800-231-2986
- [Corvallis Gazette-Times](#) (daily newspaper), 600 SW Jefferson, Phone: 541-753-2641

### Transportation

A car is often more trouble than it's worth around campus. If you must drive, a student parking permit may be purchased at registration or at the [Parking Services Office](#). Parking permits range from one day to a full year. The Coalition of Graduate Employees has a limited number of faculty/staff parking permits each year. A better solution is to get a bicycle and a helmet. Corvallis is relatively flat and well-suited for bicycling ([campus biking resources](#)). **Register your bicycle for free with Campus Security at the Public Safety Building.** There are free [campus shuttle](#) buses, that cover different parts of campus connecting parking lots and central campus that run approximately every 5 or 15 minutes. A [shuttle map](#) and [live-tracker](#) are available to monitor the next arrival. The *Corvallis Transit System* buses are also free; schedules, maps and live-tracker are available at [CTS](#) as well as the CTS phone app.

### Used Furniture and Household Items

Check [craigslist](#), the OSU Folk Club Thrift Store (corner of Jackson and NW 2nd St.), The ARC Resale Corner (928 NW Beca Ave, 541-754-9011), and garage sales. [OSU Used sales](#) are great for office furniture, tables, chairs, etc. Check their [website](#) for sales dates and times.

### Voter Registration

To vote in Oregon, you must be a United States Citizen, 18 years old, and be an Oregon resident. You must be registered to vote at least 20 days before an election. Registration forms may be obtained at most banks, the Benton County Courthouse (120 NW 4th St.), and the DMV Office (850 NE Circle Blvd., 541-757-4191). Register to vote [online](#) or by mail. (Benton County Director of Records & Elections: 541-757-6756 or Linn County Clerk: 541-967- 3831)

### **Driving in Oregon**

Oregon Driver's Licenses are available at the Oregon Division of Motor Vehicles located at 850 NE Circle Blvd., (541-757-7191). Drivers with valid licenses from another state must take the written and eye tests. Out-of-state students should apply for an Oregon license as soon as they establish a residence. Students without a valid driver's license from a U.S. State or Territory, or Canada, are required to take a written, road sign/vision, and a behind the wheel drivers test to receive an Oregon license. The behind the wheel drivers test requires an appointment and a vehicle to take the test in. New drivers must present a legal document with their full name and date of birth on it and evidence of Oregon Address (e.g., Bank Statement).

### **Recreation**

There are ample opportunities for recreation in and about the Corvallis area. The Cascade Mountains are approximately 60 miles east of town, and the Pacific Ocean is approximately 55 miles west. Locally, there is a bike path along the Willamette River, hiking trails in McDonald Forest, Mary's Peak for an excellent view of the valley, and Avery Park for picnicking. On campus, there is the [Dixon Recreation Center and the Outdoor Program](#) rents camping equipment, canoes, etc., and organizes many trips during the year.

### **Banking**

Oregon State Credit Union location information can be found on the credit union [website](#), but the closest branch to the campus is located at 148 NW 25th St. (541-714-4000). All residents of western Oregon are eligible to use the Oregon State Credit Union. Other Local Banks are Bank of America, Citizens Bank, Key Bank, U.S. Bank, Chase, Umpqua Bank, Wells Fargo, as well as several Federal Savings & Loan Associations. Most of these have facilities in Corvallis, Philomath, and Albany. Direct deposit is the preferred method of payment, and you can have your OSU payroll check direct deposited into your account at any of these institutions.

### **Staying Informed**

All general departmental and graduate student-specific announcements are via your OSU email. Please check your OSU email account regularly.

For OSU information, subscribe to a daily email from [OSU Today](#).

[The Daily Barometer](#) is a student-run resource for campus and community news.

The [Corvallis Gazette Times](#) is the local newspaper.

The [Corvallis Advocate](#) is the local independent newspaper.

## Other Resources

See the [Corvallis Living Guide](#) produced by the Office of Student Life at OSU.

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## Insurance, Health, and Counseling Resources

### Insurance

International students are required to enroll in the OSU insurance plan. OSU requires that all non-resident international students and their dependents (living in the United States) be covered by health insurance. The health insurance must meet federal, state and OSU requirements. Graduate assistants, graduate fellows, and postdoctoral scholar and fellows have a separate mandatory health insurance plan through their appointment/fellowship. For Ecampus students, if you live within 50 miles of the Corvallis campus, you have the option to purchase health insurance through the OSU-sponsored plan.

A list of plans for fellows and graduate student assistants is found [here](#).

General information about graduate assistant insurance [plan](#):

- The Graduate Employee Health Plan through PacificSource includes platinum-level coverage for medical, dental, and vision services.
- Per the Coalition of Graduate Employees (CGE) union bargaining agreement, Article 28, Oregon State University contributes 90% of the monthly premium for the employee and dependent coverage, plus 50% of the administration fee. The employee pays 10% of the monthly premium for themselves and dependent coverage, plus 50% of the administration fee.
- Premium payments are automatically deducted from your paycheck monthly.
- Summer session insurance includes the same level of PacificSource Health coverage for July, August, and September as was held during the preceding academic year. The premiums are deducted over a course of 9 months between October and June, prior to summer session. No premiums are deducted in July, August, or September if premiums are prepaid during the academic year. Therefore, to avoid paying for insurance that will not be used, it is important to opt out of summer coverage at the beginning of the academic year if you plan to be graduating in June.

Source: *Office of Human Resources, Oregon State University*

## **Health**

The [Student Health Center](#) is located at 850 SW 26th St. (next to Reser Stadium). It has MD and LPN services, pharmacy, etc. Phone 541-737-9355 for more information.

The [Benton County Health Department](#) (541-766-6835) and the [Benton County Mental Health Clinic \(541-766-6835\)](#) both located at 530 NW 27th Street, provide numerous services (including required vaccinations) on a sliding scale fee basis. Call for appointments.

A complete list of health services provided on campus are provided [here](#).

## **Counseling/Community Resources**

Several university counseling services are available to students and their families. These include the Counseling and Psychological Services (CAPS) (541-737-2131) for personal, educational-vocational, and marriage counseling. An appointment is necessary and there is a nominal fee after the first six visits. There are also Student Legal Counselors (free) in 232 Student Experience Center, who can help, especially in landlord-tenant disputes. The Women's Center located in 306 Student Experience Center (541-737-9030) offers support for both men and women students. A complete list of counseling services is provided [here](#).

[Campus Basic Needs Center](#) and the [OSU Family Resource Center](#) are also excellent resources.

[Community Outreach, Inc.](#) offers numerous emergency services. Many of their programs have restrictions, so call first to find out the requirements. Community Outreach does a good job of providing information and referring questions/clients to the right resources, so do not hesitate to call if you have a question.

The [Center Against Rape and Domestic Violence](#) provides counseling and support services including crisis intervention and temporary shelter for victims of abuse. For information call 541-758-0219 or 541-754-0110 (hotline). Additional community resources can be found [here](#).

The [Guide to Student Life](#) is a very useful resource containing information about many services, organizations, and activities. It is updated annually and available at the Student Events and Activities Center located in the Memorial Union.



## **Departmental and University Policies**

### **Enrollment**

Students funded on a BPP Graduate Assistantship must enroll for 5 credits in the summer and 16 credits in the Fall, Winter, and Spring terms. Students funded by a fellowship are required to be full-time and compliant with the enrollment criteria associated with a specific fellowship. This will typically be 3 credits in the summer and 12 credits in the Fall, Winter, and Spring terms, but consult with the Graduate School for any clarifications. Students who are self-funded are required to enroll for a minimum of 3-credits per term but are not considered full-time students unless they enroll for 3 credits in the summer and 12 credits in Fall, Winter, and Spring terms.

### **Office Space Policy**

The department provides office space for graduate students during their studies at OSU. The department attempts to provide each graduate student with a desk in shared office space containing a file cabinet and bookshelves.

### **Use of Equipment and Facilities**

It is not possible to similarly equip all projects in the department. Therefore, there may be times when the student may wish to borrow an item of equipment from another project. Student and staff members must ask permission from the appropriate PI or lab manager and be trained in the proper use and care of borrowed equipment prior to usage. They are expected to use good judgment and courtesy in the use of all equipment, and to promptly return borrowed items. Multi-use equipment items (e.g., centrifuges, autoclaves) usually have logbooks; please complete all entries for each use of the instrument.

### **Academic Honesty**

The very foundation of scientific endeavor is a strong commitment to truth. Students are expected to demonstrate honesty in all aspects of their academic work. Evidence to the contrary, after due process, will lead to termination of graduate studies in Botany and Plant Pathology. More information on Academic Misconduct and the Code of Conduct can be found [here](#).

### **Security**

Graduate students should help take responsibility for assuring that laboratory and office doors are locked at night and that windows are secured. Doors to Cordley are locked at night and on weekends. After-hours access requires using your student ID card with the card reader by the door. Never leave an outside door propped open. Wallets, purses, calculators, and other valuable items should never be left unattended in an unlocked room as daytime thefts have



occurred. Any suspicious activity should be reported to OSU Public Safety: non-emergency 541-737-3010; emergency 541-737-7000.

### **Use of Motorpool Vehicles**

Only persons who are on the OSU payroll or those who have received special permission through the department and OSU Business Office, are authorized to drive state vehicles from the OSU [Motor Pool](#). Driver authorization forms, reservations, and van safety training are all available via the Motor Pool [website](#). Student driver authorization forms must be filled out each September. They are available for "per trip" or for one year. Under no condition are state cars to be used for personal purposes. In rare cases, a spouse may accompany a staff member or graduate student in a state car, but only after receiving permission. Under no circumstances should children or pets be transported in a state vehicle.

### **Travel to Professional Meetings and Field Trips**

Graduate students who are planning to travel to professional conferences, or in-state or out-of-state for graduate school related purposes for which they will book flights and lodging, or request reimbursement must initiate a pre-trip authorization in Concur which is available online through your My Oregon State Dashboard or BeaverHub. Out-of-state travel requires authorization whether you are seeking reimbursement or not. Consult with your PI and [Kimberly Callahan](#) for any travel and Concur related questions *prior to* making arrangements. A University-owned van may be provided for university related field trips organized by students and staff, if approved by the Department Head.

Concur resources: <https://fa.oregonstate.edu/controllers-unit/travel-and-expense/training>

OSU Travel Policy: <https://fa.oregonstate.edu/fiscal-policy-program/03-140-401-travel>

Per Diem rates: <https://www.gsa.gov/travel/plan-book/per-diem-rates>

### **Department Graduate Student Travel Awards**

Students who will present a paper or poster can apply for a grant from the Halse-Kentula Travel Fund or from the Anita Summers Travel Fund.

Application process for the Halse-Kentula Travel Award is provided in the Graduate Student Association by-laws (see GSA section this document).

Applications to the Anita Summers Travel Fund can be submitted at any time during the year but must be submitted prior to attending a professional conference. Any graduate student studying under a professor in Botany and Plant Pathology is eligible for travel assistance regardless of actual degree program. However, students enrolled in other programs may request assistance only if their programs or home department does not provide similar

assistance to them for travel to a professional meeting. For students whose major is other than Botany and Plant Pathology, the student should request the signature of the program director indicating that travel funds are not available. Applications should be emailed to the Office Manager, be submitted as a single pdf, and include the following:

1. Resume (1-2 pages)
2. Proposal (1-2 pages):
  - a) date, name, and location of conference with abstract of research paper/poster submitted for presentation
  - b) brief statement of the importance of attendance at the meeting
  - c) travel budget and other identified sources of support for the meeting
3. Brief letter of recommendation from student's major professor that documents any financial support from the major professor's program (1-page)

Proposals will be reviewed by a committee that includes the Department Head and two other BPP Faculty. Awards are not guaranteed, and the number of awards made annually and throughout a student's time in the BPP graduate program is dependent upon available funds. When funds are limited, preference will be given to students near the end of their degree program. Although not required, the support of the major professor for the planned trip will be beneficial if the chairperson must limit the number of awards in a given period. Questions concerning travel awards may be directed to the Department Head.

### **Department Graduate Student Research Awards**

Graduate students in BPP are eligible to apply for graduate student research awards offered by the department. These include:

- Leslie and Vera Gottlieb Research Fund in Plant Evolutionary Biology
- Hardman Award for Native Plant Research
- Moldenke Fund for Plant Systematics
- Larry Moore Award for Graduate Education in Plant Pathology
- Portland Garden Club Katherine R. Pamplin Scholarship Fund
- Jack Pinkerton Award
- Drs James A & Stella Melugin Coakley Endowment Fund
- Anita S. Summers Travel Award (which has been amended to include research awards when funds are available)

More information is available on the BPP website under [Graduate Programs](#).

### **Use of Telephone**

University Phone Numbers have the prefix 737 and 713. When calling from one place on campus to another, dial the last five digits of the phone number. When dialing off-campus (local calls), you must first dial the 9, then the seven-digit number. Some Federal agencies located on

campus have 750-, 754-, or 757- prefix and are dialed as off-campus numbers. All phone numbers have 10 digits; the 541 area code must be used for Corvallis.

Telephones should be used only for department business. You need an Authorization number or your personal calling card number to make long-distance calls. Check with your project leader for an Authorization number.

### **Insurance Coverage for on-the-job Accidents**

Any graduate student paid with OSU funds has full medical coverage for any type of on-the-job accident. This coverage is provided through SAIF (State Accident Insurance Fund). Accidents must be reported immediately to your supervisor and a form completed within 24 hours. Accident reporting forms may be obtained from the department administrative assistant in the BPP Main Office.

All students not on state payroll who drive OSU vehicles must have a valid Oregon State driver's license and be officially cleared by the Department Head of Botany and Plant Pathology to obtain coverage of liability insurance. Forms to be filled out are in the main office. However, there is no University coverage for medical expenses resulting from a non-employee's involvement in an accident while riding in a university vehicle. Any medical coverage must be provided through the student's personal auto insurance and/or the Student Health Insurance Program.

### **Exit Interviews**

Upon completion of their degree program, all graduate students are asked to fill out an "Exit Interview Form" provided by the Office Manager and schedule an appointment with the Department Head. This is your opportunity to share your experiences in the BPP graduate program and to give us suggestions on how we might improve it. We ask that you keep us informed of changes of name and address once you have left the department/university.



## **Graduate Studies**

### **Where to find Information**

Information on graduate programs, policies, and procedures is available in the [OSU Course Catalog](#), the [Graduate School Student Success pages](#), and the Graduate School Office (phone: 541-737-4881). Dr. Aaron Liston, Associate Department Head, is responsible for and will monitor the specific requirements for the Botany and Plant Pathology program as outlined below. Students are encouraged to fully familiarize themselves with the following information.

Questions that arise can be answered by fellow students, their major professor, their major department, or the Graduate School.

## Example Timelines

Graduate student timelines vary a lot depending on student background, type of research, and funding constraints. Below are example timelines, bearing in mind that the timeline for any particular student may vary.

**MASTER'S**

	Year 1				Year 2***			
Course Work	█	█	█	█	█	█	█	
Committee Meeting	█	█						
File Program of Study	█	█						
Proposal Seminar*			█					
Defense**							█	█
TERM	F	W	SP	SU	F	W	SP	SU

**PhD with no Master's Degree**

	Year 1				Year 2				Year 3				Years 4-5****			
Course Work	█	█	█	█	█	█	█	█								
Committee Meeting	█	█	█	█	█											
File Program of Study	█	█	█	█	█											
Proposal Seminar*							█									
Prelim Exam**							█	█	█							
Defense***													█	█	█	█
TERM	F	W	SP	SU	F	W	SP	SU	F	W	SP	SU	F	W	SP	SU

**PhD with a Master's Degree**

	Year 1				Year 2				Year 3				Year 4****			
Course Work	█	█	█	█	█	█	█	█								
Committee Meeting	█	█	█	█												
File Program of Study	█	█	█	█												
Proposal Seminar*							█									
Prelim Exam**							█	█	█							
Defense***															█	█
TERM	F	W	SP	SU	F	W	SP	SU	F	W	SP	SU	F	W	SP	SU

\*Proposal seminar should be given at BPP's annual Graduate Student Celebration.

\*\* Prelim exam must be scheduled 2 weeks in advance with graduate school. Follow guidelines set out in handbook to complete preliminary exam.

\*\*\* Defense must be scheduled two weeks in advance with graduate school and pretext pages submitted at time of scheduling. Thesis or Dissertation must be given to committee for review two weeks in advance of defense. For PhD students, 6 months is the minimum time that can pass between prelim exam and defense.

\*\*\*\* Suggested time frames for degree completion, but these may be extended. Talk with your advisor about funding and expectations for degree completion.

### **Full-time Enrollment Policy**

Unless on approved Leave of Absence, all graduate students in graduate degree and certificate programs must register continuously for a minimum of 3 graduate credits, including summer session, until their degree or certificate is granted, or until their status as a credential-seeking graduate student is terminated. This is the “[continuous enrollment policy](#)” as described in detail on the Graduate School’s website. The Graduate School has a [form](#) and process for granting leaves of absence.

**Students funded on a BPP Graduate Assistantship must enroll for 5 credits in the summer and 16 credits in the Fall, Winter, and Spring terms.** Students funded by a fellowship are required to be full-time and compliant with the enrollment criteria associated with a specific fellowship. This will typically be 3 credits in the summer and 12 credits in the Fall, Winter, and Spring terms, but consult with the Graduate School for any clarifications. Students who are self-funded are required to enroll for a minimum of 3-credits per term but are not considered full-time students unless they enroll for 3 credits in the summer and 12 credits in Fall, Winter, and Spring terms.

### **Formal Requirements for Degree Programs**

Master's candidates develop their Program of Study in consultation with the major professor, although the department advises full committee participation as with PhD. Graduate School regulations stipulate that the program must include 45 credit hours. In contrast, the doctoral program is approved at a formal meeting of the full program committee, and a total of 108 credits are required. The signature of the Associate Department Head or Department Head is required for both M.S. and Ph.D. programs. A dissertation is required for the Ph.D. degree; M.S. students may choose a thesis or non-thesis option. Programs of Study must be submitted online via the Graduate School and includes all proposed and any previously completed and approved graduate coursework. A minimum of 50% of the credits included in the Program of Study must graduate only credit, i.e., no slash courses, 4XX/5XX.

Master's Degree. A regular graduate student must file a Program of Study with the Graduate School before the completion of 18 hours of graduate coursework, typically before the end of their second term.

Doctoral Degree. A graduate student who holds a master's degree must file a study program with the Graduate School by the end of one calendar year of enrollment as a doctoral student. A graduate student who intends to bypass a master's degree must file a study program with the Graduate School by the end of the fifth quarter of enrollment as a doctoral student.

### **Role of the Major Adviser and Program Committee**

The program committee for an M.S. degree consists of the major adviser, a Graduate Council Representative (GCR), and two other graduate faculty members (including at least one from the major field). A minor is not required, but if being pursued, one of the two other graduate faculty members must be able to serve as the graduate minor committee member. For the final examination, the minimum examining committee consists of the major professor, the GCR, and the two other graduate faculty members.

For a Ph.D. degree, the minimum committee consists of the major adviser, the minor adviser (if applicable), two additional members of the graduate faculty (including at least one from the major field), and a GCR.

For both master's and doctoral programs, the GCR is chosen by the student from a list provided by the Graduate School. This representative is from outside the major and minor fields and serves to ensure that the requirements and standards of the Graduate School are upheld, and that the candidate is treated fairly by the program committee. Students are free to have additional members on their committees, and to have a co-major adviser if they believe this would be appropriate and beneficial. Students should consult their major professor concerning the procedures for selecting committee members.

The major and minor advisers for an M.S. degree usually meet once to approve the graduate program. While a M.S. degree program meeting is not required by the Graduate School, the department encourages that the student obtain input from all committee members prior to submitting their Program of Study. The entire committee meets for the defense (final examination).

For the Ph.D. degree, the full committee is required to meet for the Program of Study meeting, the preliminary examination, and the defense (final examination). In practice, many committees meet more frequently than the minimum requirement to provide the student with an opportunity for feedback and advice on the progress of coursework and research. Any changes in an approved program requires committee approval, the Associate Department Head's signature, and Graduate School approval.

### **Graduate Programs of Study**

Graduate Programs of Study vary considerably, depending on the student's previous training, the individual committee, and the candidate's field of study. Our students generally take coursework both within and outside the department.

The Graduate School has numerous rules and policies that at all Programs of Study must adhere to. These are summarized below in BPP Guidelines for Graduate Programs and at the Graduate School website. The only required course for Botany and Plant Pathology graduate students is BOT508 Graduate Student Orientation, but recommended core curricula have been developed for some subdisciplines within the department and are provided below in the BPP Recommended Graduate Curricula. AED508 GTA Workshop is also required for students who will be on a Graduate Teaching Assistantship for any term during an academic year.

## **Examinations**

M.S. Programs. A final oral examination is required for the M.S. degree. The examination consists of two parts. The first involves a public seminar by the candidate, which is followed by a short question-and-answer period. This part of the examination is open to all interested persons. The second part of the examination provides an opportunity for the program committee to question the candidate concerning thesis and/or coursework. This part of the examination is restricted to the examining committee and is followed by a discussion and vote by the program committee, in the absence of the candidate, concerning the performance of the student. One dissenting vote is allowed for a recommendation of "pass." Generally, two re-examinations are the maximum allowed.

Ph.D. Programs. Doctoral candidates take both a preliminary and a final examination. The preliminary examination consists of both a written and an oral section described below in BPP PhD Preliminary Written and Oral Exams. The final examination consists of two parts. The first involves a public seminar by the candidate, which is followed by a short question-and-answer period. This part of the examination is open to all interested persons. The second part of the examination provides an opportunity for the program committee to question the candidate concerning thesis and/or coursework. This part of the examination is restricted to the examining committee and is followed by a discussion and vote by the program committee, in the absence of the candidate, concerning the performance of the student. One dissenting vote is allowed for a recommendation of "pass." Generally, two re-examinations are the maximum allowed.

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## **BPP GRADUATE PROGRAM POLICIES, GUIDELINES, AND RECOMMENDATIONS**

- Policy on Foundational Coursework for Incoming Graduate Students
- BPP Guidelines for Graduate Programs
- BPP Recommended Graduate Curricula
- BPP PhD Preliminary Written and Oral Exams
- Regulations Concerning the Thesis for Advanced Degrees

- Departmental Guidelines for the Non-Thesis Master's Option
- Teaching Requirement of Ph.D. Candidates
- Procedures for Requesting Waivers/Substitutions for the Ph.D. Teaching Requirement
- Policy on Annual Graduate Student Review
- Graduate Assistantships
- Departmental and University Seminars
- Policy on Thesis Proposal Seminars/Required Graduate Student Seminars



## Policy on Foundational Coursework for Incoming Graduate Students

### Policy approved by Voting Faculty, 17 February 2011

The Department has no specific set of courses that are required for admission into its Graduate Program (i.e., no specific prerequisites). For admission, the Graduate Studies Committee will look at the entirety of the application, including an applicant's academic transcript, to assess whether the student is likely to succeed in graduate school. This assessment will take into account the intended graduate study area for each applicant. Thus, given the breadth of research areas in the Department, the set of foundational (i.e., primarily undergraduate) courses that indicate likely success for each applicant will be distinct.

However, the following set of coursework should provide a good background for graduate study in our Department, and thus sets out a 'recommended' path for many of our incoming graduate students.

Recommended coursework includes:

1. **Biology** – includes a year of general biology, plus at least two upper division biology courses. Genetics is recommended as one of the upper division courses.
2. **Chemistry** – through organic chemistry, as well as biochemistry or environmental chemistry.
3. **Mathematical foundation** – includes statistics, calculus, linear algebra, physics and/or computer programming. Both statistics and calculus are recommended.

Coursework completed prior to admission will also be taken into account when determining eligibility for Graduate Teaching Assistantships, given that background knowledge is important for successful teaching.

Efforts will be made to ensure that the transcripts and experiences of applicants with 'non-traditional' backgrounds are assessed fairly. For example, evidence of extensive professional experience in a particular area could substitute for less coursework in that area.

### Assessing Foundational Coursework for Graduate Study

In some cases, admission may carry a specification for additional foundational coursework to be completed early in the student's graduate program. Immediately upon acceptance, an applicant will be assigned to a single major professor, or, if the applicant will participate in lab rotations in the first year, a group of two or three advising professors. The major professor/advising professors will be provided with a summary of the student's completed coursework (generated during the admissions process). It will be the responsibility of the major professor/advising professors, in consultation with the applicant and the Chair of the Graduate Studies Committee, to determine whether the applicant has a suitable background of foundational courses for their chosen research area. Advice from other faculty members (e.g., potential members of a

student's program committee) may be sought in this process. Following an initial assessment, any academic areas that need strengthening will be clearly identified for the applicant in the acceptance/offer letter. This will allow the applicant to plan to address these areas with coursework either prior to arrival at OSU, or in the first year at OSU. A finalized foundational coursework assessment, with a strengthening plan for addressing any needs (if necessary), must be submitted by the major professor to the Chair of the Graduate Studies Committee by the end of the fifth week of the accepted student's first term. A copy of this finalized assessment will be placed in the student's file (as will the acceptance/offer letter).

When a student sets up his/her Graduate Program Committee, the members of the Committee will be informed of the outcome of the foundational coursework assessment via reference to the summary, and also of the progress of the student on the strengthening plan (if any). If appropriate, strengthening coursework can be incorporated into the official Graduate Program of study. The Graduate Program Committee has the responsibility to ensure that the student successfully completes the strengthening plan.

## BPP Guidelines for Graduate Programs

### Graduate Programs

A Graduate Program is essentially an agreement between the student, major professor and the student's graduate committee on coursework required for the degree. The program is submitted to and approved by the Graduate School.

### Formal Requirements for Degree Programs

OSU's graduate degree program policies are specified [here](#). These policies change over time, so be sure to check that website, though you can use the following summary to get you started.

Master's candidates develop their Program of Study in consultation with the major professor, although the department advises full committee participation as with PhD. Graduate School regulations stipulate that the program must include 45 credit hours. In contrast, the doctoral program is approved at a formal meeting of the full program committee, If a minor is declared, 18 credit hours are required (15 credit hours for an integrated minor). A total of 108 credits are required. The signature of the Associate Department Head or Department Head is required for both M.S. and Ph.D. programs. A dissertation is required for the Ph.D. degree; M.S. students may choose a thesis or non-thesis option. Programs of Study must be submitted online via the Graduate School and includes all proposed and any previously completed and approved graduate coursework. A minimum of 50% of the credits included in the Program of Study must graduate only credit, i.e., no slash courses, 4XX/5XX.

### Deadlines for Filing Graduate Programs

1. **M.S. Students:** The Graduate School requires programs be filed before completion of 18 credits. M.S. students entering in the fall should file a program by the end of winter term. This coursework includes graduate hours reserved as an undergraduate student and hours earned as a post-baccalaureate, graduate special student, and regular graduate student.
2. **Ph.D. Students:** Ph.D. students with a master's degree must file a Program of Study within one calendar year of entry. Ph.D students entering with a bachelor's degree should file by the end of the fifth quarter of enrollment. For students entering in the fall, this means they have to file a program by the end of fall term the following year.
3. Programs of Study must be submitted online via the Graduate School, include all proposed and any previously completed and approved graduate coursework. A minimum of 50% of the credits included in the Program of Study must graduate only credit, i.e., no slash courses, 4XX/5XX.

*Please note that failure to file a program by the required deadline may result in a student being unable to register or to be paid (placed on appointment).*

## **Preparation of Graduate Programs.**

### **Graduate Majors:**

- Graduate majors are specified in the Graduate Catalog. For all students who are not enrolled in another department or in an interdepartmental program, the major should be designated as "Botany & Plant Pathology".
- If a student desires to do so, they may also specify an area of concentration within the major (from one of the approved areas listed in the Graduate Catalog). Thus, a student in plant pathology could list their graduate major as "Botany & Plant Pathology - (Plant Pathology)". Please note the specific format used.

### **Graduate Minors:**

- Graduate minors are optional on both M.S. and Ph.D. programs. If a minor is elected for an M.S. program, the minor must include a minimum of 15 credits. If a minor is elected for a Ph.D. program, the minor must include 18 credits, with the exception of Integrated Minors (see below) which require only 15 credits.
- Graduate minors may be chosen from any approved graduate major, from an approved minor listed in the Graduate Catalog, or from a different area of concentration within the major field. Minors may also be specified as "Integrated". An integrated minor consists of a series of cognate courses from two or more areas. These courses must be outside the major area of concentration, with most of the courses being outside the major department. The graduate faculty member representing the integrated minor must be from outside the major department. Graduate minors are listed on the student's transcript.
- Some departments and programs have specific course requirements for a minor.
- For an Integrated Minor, the selection of a minor professor should take into account the Graduate School requirement that at least one course from the department of the minor professor must appear on the graduate program.

### **M.S. Students:**

- For thesis degrees, 45 credits must appear on the program, including 6-12 credits of thesis (BOT 503), and no more than 9 blanket numbered credits (BOT 50X), other than thesis,
- For non-thesis degrees in Botany and Plant Pathology, 45 credits must appear on the program, including 9 credits of non-thesis research (BOT 501) and no more than 9 blanket numbered credits (BOT 50X) other than research.
- For M.S. programs that include a minor, an appropriate minor professor must be selected, and both the major professor and the minor professor must sign the program before it is filed.
- For M.S. programs that do NOT include a minor, the signature of the major professor and that of one additional member of the Program Committee (other than the Graduate School

representative) are required on the program. The additional signature should ordinarily be that of a faculty member from outside the Department of Botany & Plant Pathology.

#### **Ph.D. Students:**

- 108 credits must appear on the program.
- A minimum of 36 regular (non-blanket) credits must appear on the program.
- A minimum of 36 thesis credits (BOT 603) must appear on the program.
- No more than 15 blanket numbered credits (BOT 60X), other than thesis, may be included in the 108 credits required for the program.
- A minor does **not** have to be declared.
- A Ph.D. candidate should not have received all of their academic training at Oregon State University, but they may receive all of their degrees from this institution.

#### **C. Composition of Graduate Program Committees.**

##### **M.S. Program Committees:**

- For M.S. programs that include a thesis and a minor, the Program Committee consists of a **minimum** of four graduate faculty members, including the major and minor professors, at least one additional faculty member with graduate faculty status (usually from the major department), and a Graduate School Representative.
- The Graduate School Representative is selected from approved lists maintained by the Graduate School. The agreement of the faculty member selected to serve as the Graduate School Representative must be obtained for the specific program in question.
- For M.S. programs that include a thesis but do NOT include a minor, the Program Committee consists of a **minimum** of four graduate faculty members, including the major professor, two additional faculty members with graduate faculty status (usually one from the major department and one from outside the major department), and the Graduate School representative.
- For non-thesis M.S. programs, a Graduate School Representative is not required. The Program Committee consists of four graduate faculty members, including the student's major advisor, a minor professor (if a minor is selected) or (alternatively) one faculty member from outside the Department, and two additional faculty members with graduate faculty status (at least one of which should be from within the major department).

##### **Ph. D. Program Committees:**

- Ph.D. degree committees consist of a **minimum** of five graduate faculty members, including the major professor, the minor professor (if a minor is declared) or (alternatively) one faculty member from outside the major department, at least two additional faculty members, and the Graduate School Representative.

- The Graduate School Representative is selected from approved lists maintained by the Graduate School. The agreement of the faculty member selected to serve as the Graduate School representative must be obtained for the specific program in question.

**D. Additional Considerations in Forming Graduate Programs and Program Committees.**

- Major professors who hold courtesy appointments or research professor appointments in Botany and Plant Pathology or who are stationed off-campus are requested to include at least one on-campus tenure-track faculty member from the Department of Botany and Plant Pathology on the Program Committee.
- For Integrated Minors (as well as any other minor), the selection of a minor professor should take into account a requirement of the Graduate School that at least one course from the department or program of the minor professor must appear on the graduate program.
- Individuals holding faculty rank within the Oregon University System cannot receive a graduate degree from OSU without special permission.
- BOT 501 or 601 (Research) should be used for only those research activities that will NOT be included in a thesis (e.g., rotations, non-thesis M.S.). BOT 503 or 603 (Thesis) should be used for all research activities associated with the thesis.
- **To avoid technical errors, drafts of graduate programs should receive a preliminary review by the Associate Department Head prior to collecting signatures of committee members.**

## Botany and Plant Pathology Recommended Graduate Curricula

### Biological Data Sciences "Track"

#### Fall

BOT 508 GRADUATE STUDENT ORIENTATION (1cr - Spatafora)<sup>1,2</sup>  
BDS 574 INTRODUCTION TO GENOME BIOLOGY (3 cr - Chang)

#### Winter

BDS 575 COMPARATIVE GENOMICS (4 cr - Liston)  
BDS 578 FUNCTIONAL GENOMICS (3 cr - Anderson)

#### Spring

BDS 572 ADVANCED COMPUTING FOR BIOLOGICAL DATA ANALYSIS (3 cr - Megraw)  
BDS 577 POPULATION GENOMICS (3 cr - Uehling)

#### Other Courses to build quantitative competencies.

BB 585 APPLIED BIOINFORMATICS (3 cr )  
IB 516 ANALYTICAL WORKFLOWS<sup>2</sup> (4 cr)  
BDS 599 COMMAND LINE DATA ANALYSIS<sup>2</sup>  
BDS 599 ENVIRONMENTAL SEQUENCE ANALYSIS<sup>2</sup>  
BDS 599 INTRODUCTION TO UNIX, LINUX<sup>2</sup>  
BDS 599 PYTHON I<sup>2</sup>  
BDS 599 PYTHON II<sup>2</sup>  
ST 511 METHODS OF DATA ANALYSIS (4 cr)  
ST 512 METHODS OF DATA ANALYSIS (4 cr)  
ST 513 METHODS OF DATA ANALYSIS (4 cr)

### Plant Health "Track"

#### Fall

BOT 508 GRADUATE STUDENT ORIENTATION (1cr - Spatafora)<sup>1,2</sup>  
BOT 551 PLANT PATHOLOGY (4 cr - LeBoldus)  
BDS 570 INTRODUCTION TO COMPUTING IN THE LIFE SCIENCES<sup>2</sup> (3 cr - Megraw)

#### Winter

BOT 513 FOREST PATHOLOGY (3 cr - LeBoldus)  
BOT 555 EVOLUTIONARY DYNAMICS OF PLANT PATHOGENS (4 cr - Weisberg)

#### Spring

BOT 554 MOLECULAR BASIS OF PLANT PATHOGENESIS<sup>2</sup> (3 cr - Goyer)

#### Summer

BOT 553 PLANT DISEASE DIAGNOSIS<sup>2</sup> (3 cr - Pscheidt, even years only)

Other Courses to build quantitative competencies

BB 585 APPLIED BIOINFORMATICS (3 cr)  
IB 516 ANALYTICAL WORKFLOWS<sup>2</sup> (4 cr)  
BDS 572 ADVANCED COMPUTING FOR BIOLOGICAL DATA ANALYSIS (3 cr)  
BDS 574 INTRODUCTION TO GENOME BIOLOGY (3 cr)  
BDS 575 COMPARATIVE GENOMICS (4 cr)  
BDS 577 POPULATION GENOMICS (3 cr)  
BDS 578 FUNCTION GENOMICS (3 cr)  
BDS 599 COMMAND LINE DATA ANALYSIS<sup>2</sup>  
BDS 599 ENVIRONMENTAL SEQUENCE ANALYSIS<sup>2</sup>  
BDS 599 INTRODUCTION TO UNIX, LINUX<sup>2</sup>  
BDS 599 PYTHON I<sup>2</sup>  
BDS 599 PYTHON II<sup>2</sup>  
ST 511 METHODS OF DATA ANALYSIS (4 cr)  
ST 512 METHODS OF DATA ANALYSIS (4 cr)  
ST 513 METHODS OF DATA ANALYSIS (4 cr)

Notes:

Consider renumbering courses sequentially (e.g., 551, 552, 553, 554, 555, etc.)  
BOT552 Plant Disease Diagnosis (suspended; winter term but no instructor)

**Recommended Ecology, Evolution, Organismal Biology "Track"**

Fall

BOT 508 GRADUATE STUDENT ORIENTATION (1cr - Spatafora)<sup>1,2</sup>  
BDS 570 INTRODUCTION TO COMPUTING IN THE LIFE SCIENCES<sup>2</sup> (3 - Megraw)  
BOT 545 ADVANCED PLANT ECOLOGY (3cr - Jones)

Winter (minimum one class)

BOT 588 ENVIRONMENTAL PHYSIOLOGY OF PLANTS (3 cr - Milligan)  
BDS 575 COMPARATIVE GENOMICS (4 cr – Liston)

Spring

BDS 577 POPULATION GENOMICS (3 cr – Uehling)

One Organismal Course (3-4 credits)

BOT 516 AQUATIC BOTANY (4 cr - Milligan)  
BOT 561 MYCOLOGY (4 cr - Uehling)  
BOT 517 PHYCOLOGY (4 cr - Milligan)  
BOT 525 FLORA OF PNW (3 cr - Mickley)

Other Courses to build quantitative competencies



BB 585 APPLIED BIOINFORMATICS (3 cr)  
IB 516 ANALYTICAL WORKFLOWS<sup>2</sup> (4 cr)  
IB 554 EVOLUTIONARY GENOMICS (3 cr)  
BDS 572 ADVANCED COMPUTING FOR BIOLOGICAL DATA ANALYSIS (3 cr)  
BDS 574 INTRODUCTION TO GENOME BIOLOGY (3 cr)  
BDS 578 FUNCTION GENOMICS (3 cr)  
BDS 599 COMMAND LINE DATA ANALYSIS<sup>2</sup>  
BDS 599 ENVIRONMENTAL SEQUENCE ANALYSIS<sup>2</sup>  
BDS 599 INTRODUCTION TO UNIX, LINUX<sup>2</sup>  
BDS 599 PYTHON I<sup>2</sup>  
BDS 599 PYTHON II<sup>2</sup>  
ST 511 METHODS OF DATA ANALYSIS (4 cr)  
ST 512 METHODS OF DATA ANALYSIS (4 cr)  
ST 513 METHODS OF DATA ANALYSIS (4 cr)

Notes:

BOT 570 COMMUNITY STRUCTURE & ANALYSIS<sup>2</sup> (winter term but currently no instructor)  
BOT 565 LICHENOLOGY (4 cr - spring term odd yrs but currently no instructor)  
BOT 566 BRYOLOGY (4 cr - spring term even yrs but currently no instructor)

<sup>1</sup>Required

<sup>2</sup>Grad Only

## BPP PhD Preliminary Written and Oral Exams

The PhD preliminary exam for advancement to PhD candidacy should be taken as stipulated by the Graduate School, currently “after completion of or while currently registered for all course work required by the program.” The exam will consist of two portions: written and oral. The written part should be planned to immediately precede the oral prelim exam. The preliminary exam should be scheduled at or near the end of the second year of a student’s graduate program (typically during the 7<sup>th</sup> or 8<sup>th</sup> quarter of enrollment, and after the student has given their Departmental proposal seminar). ***The exam must be passed by the end of the Fall term of the third year to remain in good standing in the PhD program.*** Under exceptional circumstances, a delay of no more than two terms may be requested but must be approved by the student’s thesis committee.

### Written exam

The student writes a dissertation proposal following the format, including page limits, font size and margins, used by a recognized funding agency (e.g., NSF, NIH, USDA, EPA, etc.) that is appropriate for the student’s field of study. The content and format should be approved by the student’s examination committee. A length of 8-15 pages (not including references, but including figures, legends and a timeline for the project) is recommended. A budget is not required.

The purpose of the dissertation proposal is to allow the student to formulate and defend a proposed body of research. The thesis proposal is not a contract for what must be accomplished during the Ph.D. program, but it should be a cohesive research proposal that defines the topic to be addressed, presents a plan to investigate that topic that is well-reasoned and defensible based on current knowledge, and is of a scope reasonable for a Ph.D. thesis. Although some of the ideas and approaches presented in the proposal may have originated from the advisor or others (typical of the collaborative nature of science), it is ***required*** that the proposal be written in the student’s own words and that it includes material over which the student has intellectual ownership.

It is hoped that this process will lead to the submission of a proposal to a funding agency in the scientific area of interest, but it is not a stipulation for advancement to candidacy.

The written exam should be approved if the student has successfully demonstrated the ability to 1) assimilate a body of scientific literature, 2) pose interesting and tractable questions, 3) propose practical and effective methods for answering those questions, and 4) demonstrate creativity and originality. The written exam should be rejected if it fails in any two categories.

### Steps:

1. The student chooses the subject and format for the thesis proposal in consultation and with the approval of the major professor.

2. The student submits a one page abstract to the program committee for approval before the proposal is written.
3. The student obtains an [BPP Abstract Approval Form](#) from the Office Manager.
4. The student consults with each program member individually and, on their approval, obtains each signature on the abstract approval form.
5. Once approved and signed, a copy is provided to the Office Manager.
6. The student writes the thesis proposal and submits it to the committee at least three weeks prior to the planned oral examination. Submit it as hard copy or electronically as desired by the committee members.
7. Within two weeks of the date that the proposal is submitted, the major professor solicits responses from the committee and delivers the conclusion to the student. Three options are available to the committee: approved, revise and resubmit, and rejection.
8. Upon approval of the written thesis proposal by the program committee, the student may proceed with the oral exam.
9. Once a date, time, and place for the oral exam has been arranged with committee members, an [exam scheduling form](#) should be filled out and submitted to the Graduate School **at least two weeks** prior to the exam.

## Oral exam

The oral exam of **no less than two hours** includes a one-hour defense of the proposal and a one-hour general oral exam, covering subjects beyond the scope of the proposal.

The part of the oral exam concerning the dissertation proposal should test the student's ability to defend their proposed dissertation research. The originality of the proposal, the scholarly quality of the literature review, and the technical feasibility of the approach should be evaluated. In addition, the student should demonstrate a capacity for critical thinking and a broad command of their general and more specific field. Given that all committee members have read the proposal, an extensive presentation is not necessary; rather, a short, ~10-minute summary that outlines the background and importance of the problem being addressed, and the main aims to be pursued is sufficient. Unlike a seminar, the presentation will be interrupted by questions for the student from the committee members.

Committee members are encouraged to incorporate ethics into the exam in accordance with policies of the Graduate School.

If committee members find that it is appropriate, two retests of the exam will be allowed, in keeping with Graduate School guidelines.

Policy adopted 05 March 2019

## Regulations Concerning the Thesis for Advanced Degrees

Theses and dissertations submitted for advanced degrees in the Department of Botany and Plant Pathology must include a comprehensive review of pertinent literature and can follow two general formats:

1. Divided into chapters with a general Introduction and Discussion and Bibliography. Each chapter must contain: an Introduction, Materials and Methods, Results, Discussion, Bibliography
2. One document containing: General Introduction, Materials and Methods, Results, Discussion, Bibliography

Both forms must also include – Title Page, Abstract, Approval Sheet and Table of Contents – with these pages following [Graduate School Guidelines](#).

### Advantages to Format 1:

Breaking a thesis or dissertation into chapters allows each chapter to be a complete manuscript submitted, accepted for publication, or published. Hence, the format of individual chapters (e.g., method of literature citation in the text) may be different from other chapters as well as from the text of the general Introduction and Discussion. If format 1 is used, chapters should have a coherent, overall focus on a particular question or problem as described in the general Introduction and elucidated in the general Discussion. Supplementary methods and results that would be excluded from journal publications, but presented in the traditional thesis should be included as an additional chapter or Appendix.

The Department of Botany and Plant Pathology does not approve, in lieu of the final thesis, the submission of only reprints of published papers or manuscripts.

The Department of Botany and Plant Pathology requires one printed copy of the thesis or dissertation be submitted for the department.

### Graduate School Guidelines

Regardless of format, the thesis or dissertation must [meet the style, margin, and other esthetic requirements](#) set by the Graduate School.

Approved by the Graduate Faculty of the Department on February 13, 1979.

## **Guidelines for the non-thesis Master's Option**

1. The transcript shall indicate that the Master's Degree was obtained without the completion of a thesis. ("No Thesis Required" is written where thesis title is usually placed.)
2. The non-thesis M.S. degree in Botany and Plant Pathology degree programs include a minimum of 45 credits with 3-6 credits of non-thesis research (BOT501). Any research units earned while rotating through laboratories will contribute towards this requirement. The research units may be earned in one to several laboratories with the consent of the advisor and the research director (s), but at least four units must be earned in a single laboratory.
3. Each student shall be assigned a Program Advisor. The Temporary Advisor assigned from the Graduate Studies Committee will continue in this role in those cases where another Program Advisor is not identified. The Program Committee shall consist of three members of the Graduate Faculty, two representing the candidate's major area of interest (one of whom is the student's program advisor) and one representing the candidate's minor area of interest. This committee should meet near the completion of 18 credits, which coincides with the Graduate School deadline for filing the coursework program.
4. The Final Examination shall consist of a seminar, open to all, followed by questioning of the candidate by the candidate's Program Committee. The seminar topic will be chosen by the candidate and their committee and will normally deal with the research experiences of the individual along with literature references pertaining to the research topic. An outline of the proposed seminar should be approved by the Program committee several months in advance of the seminar. At the seminar, questioning by the committee will focus on the seminar topic and the knowledge obtained by the candidate through coursework studies.
5. Students may transfer between the Thesis and Non-thesis Options with the consent of the Graduate Studies Committee and the Program or Thesis Advisor.

Guidelines adopted by a vote of the faculty of the Department of Botany and Plant Pathology on 26 November 1991.

## Teaching Requirement of PhD Candidates

Teaching experience is a requirement for Ph.D. candidates. Students will fulfill this requirement by serving a minimum of two quarters as a Graduate Teaching Assistant (GTA). Students may fulfill this requirement in any year of their Ph.D. program, although assignments will be made as influenced by the student's needs and the needs of the Department. Assignments of students to individual courses will be made by the Department Head in consultation with the course instructors. Students entering the Ph.D. program with previous experience as teaching assistants may apply this experience to the teaching requirement. (See "Procedures for Requesting Waivers/Substitutions for the Ph.D. Teaching Requirement".)

While serving as a teaching assistant, students will be appointed at 0.49 FTE and their monthly salary, which will be equivalent to that paid GRA's, will be paid from GTA funds (unless the student is supported by a fellowship).

Teaching is not a requirement for Master's students. However, Master's students will be made aware of teaching opportunities when they occur and will be encouraged to take advantage of these opportunities.

Three models for completion of the teaching requirement include but are not limited to the following:

- 1). A student will serve as a teaching assistant in the same course in subsequent years. This has the advantage of continuity, thereby allowing the student to focus on improvement of specific skills in the second year.
- 2). A student will serve as a teaching assistant in two different courses during their first year in the program. This has the advantage of breadth, thereby exposing the student to different teaching situations, mentors, and classes.
- 3). A student will postpone the teaching assignment beyond the first year. This has the advantage of flexibility, thereby allowing a student to take advantage of a fellowship, improve English skills, make up deficiencies, etc.

Approved by the Graduate Faculty of the Department on March 25, 1991

## **Procedures for Requesting Waivers/Substitutions for the PhD Teaching Requirement**

1. Requests for waivers or substitutions for the teaching requirement should be made within the first year of the student's academic program and no later than the time at which the student's program is filed. Requests for a waiver or substitution that are made after a program is filed will not ordinarily be granted.
2. Requests for waiver or substitution of one term of the teaching requirement will ordinarily be granted if the student can document that they have had the reasonable equivalent of one term of teaching experience involving group settings and some area of the life sciences (e.g. teaching experience in another department or university). For this purpose, professional seminar and poster presentations will not be considered teaching experience, because it is assumed that all graduate students will have this type of experience. Requests for waiver or substitution for both terms of the teaching requirement will be granted rarely and in only those cases where the student can document comparable teaching experience.
3. Requests should be submitted by the student with an explanation of why the waiver or substitution is being requested. Requests should be submitted in writing, addressed to the Associate Department Head, and accompanied by a supporting email from the major professor.
4. Decisions to grant or refuse requests for waivers or substitutions will be made by the Associate Department Head on the basis of the general guidelines developed by the Department. Ordinarily, such decisions will be made in consultation with the Chair of the Graduate Studies Committee or the Department Head.
5. The Department reserves the right to refuse to appoint a graduate student to a teaching assistantship.
6. Appeals of the decisions of the Associate Department Head may be lodged with the Graduate Studies Committee. The appeal request should be addressed to the Chair of the Graduate Studies Committee and copies to the Associate Department Head. If desired, decisions of the Graduate Studies Committee may be appealed to the Head of the Department.

Approved by the Graduate Faculty of the Department of Botany and Plant Pathology on April 26, 1999

Modified June 2020

## **Annual Graduate Student Review**

### **Policy on Annual Graduate Student Review**

Graduate students enrolled in the Department will be reviewed by their major professor (or temporary advisor), annually, during fall term. A standard evaluation form is to be completed by each major professor with "Completed," "Scheduled," or "Anticipated" dates provided in the "Milestone" category. The professor also will provide written comments on progress made and goals for the upcoming year. These comments should accurately reflect the activities of the student in the previous year. Major professors are encouraged to use this annual evaluation as a written benchmark to show that the student is making satisfactory progress toward degree completion. Major professors are encouraged to involve the student in providing specifics on progress made as well as the goals for the upcoming year.

Major professors must provide a copy of the review to the student and then should arrange a time to discuss its content. Students are required to sign the completed review and may append their own comments if they choose. Students should feel free to discuss concerns they may have with the review, or other matters concerning their graduate program, with any of the following: their major professor, the Graduate Studies Committee (or its chairperson), individual members of their program committee, or the department head. In special instances, the department head may refer the student to the Dean of the Graduate School for assistance, e.g., when individuals outside the Department are involved.

The Graduate Studies Committee will monitor the completion of annual reviews. This committee will seek assistance from the department head if concerns arise with either student progress or faculty mentoring.

Graduate students seeking to change their major professor, or the type of degree are encouraged to seek counsel from their current advisor, a member of the graduate studies committee, or the department head.

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*Adopted by vote of professorial faculty on 6 June 1996.*



## Graduate Assistantships

Selection of Graduate Teaching Assistants (GTAs). Departmental approval of admission and subsequent official notification of admission by the University Office of Admissions is prerequisite to any offer of financial support to an applicant. The Graduate Studies Committee of the department advises the Department Head on matters related to GTAs. The Committee screens the applications and makes specific recommendations concerning the award of GTAs.

The criteria used in selecting GTAs include the following:

1. The merit of the applicant as judged by the previous scholastic record, letters of recommendation, GRE scores, and the applicant's statement of career objectives;
2. Availability of faculty with expertise in the applicant's field of interest, facilities and financial resources to support the applicant's thesis research, and willingness to serve as major professor for the applicant;
3. Compatibility of the applicant's previous academic training and current area of interest with the staffing needs of the department. In the case of foreign students, language skills are an additional important consideration. All international students whose native language is not English must take the SPEAK test before they are allowed to serve as a GTA.

Occasional resignations or the acquisitions of new positions may result in teaching assistantships becoming available during the academic year; these positions are usually filled from the pool of graduate students needing support to complete their degrees.

Selection of Graduate Research Assistants (GRAs). The criteria for selecting GRAs are similar to those used in the selection of GTAs, but the source of funds for the GRA is an additional consideration of major importance. Stipends for GRAs are made possible through research grants from external sources. These funds are allocated specifically for the support of a defined research project. Therefore, the applicant selected for a GRA must be qualified to contribute to the particular research program providing the support and be willing to make a specific commitment to that program.

Diversity Advancement Graduate Assistantship. We invite applicants for the [BPP Diversity Advancement Graduate Assistantship](#). We provide funding for a graduate assistantship to increase the ethnic and cultural diversity in plant sciences, to promote diversification of the academic environment in BPP and OSU, and to prepare students for their future careers in academics and industry. This assistantship is intended to create opportunities that enhance the inclusion of graduate students from nontraditional backgrounds who have expressed interests in a career in the plant sciences. Applications are due Dec. 1 for the assistantship to be awarded the following academic year.

Renewal of Financial Support. Subject to satisfactory progress in the degree program, satisfactory performance of assistantship duties and the availability of funding, the policy of the department has been to renew graduate teaching and research assistantships to provide a total

of two years of support in the case of M.S. programs or four years of support in the case of Ph.D. programs. This policy is seldom rigorously enforced but the Department usually requests justification for students taking more than three years for an M.S. or five years for a Ph.D. degree.

Stipends for Graduate Teaching and Research Assistantships. The departmental office can provide a current list of stipends, fees, and benefits. Graduate students entering the Department of Botany and Plant Pathology on appointments as GTAs (usually one to three terms of three months) or Graduate Research Assistants (variable length, often 12 months) are appointed at a stipend (revised annually) at a 0.49 FTE. Tuition remission is provided for graduate students holding appointments of .20 FTE or greater stipends but must pay student fees (revised each year). All Ph.D. candidates are required to teach two quarters. It is the students' responsibility to contact the department head about the availability of teaching availability.

GTA appointments are usually only for the 3 to 9 months of the academic year. Most students are employed by their advisers during the summer term from research grants. Be sure to ask your adviser about summer support. Cheryl Hagey in the BPP main office should be consulted regarding any actions needed for summer employment. Students that are employed during the summer are expected to enroll in 5 credits of Thesis (BOT 503/603).

### Summer Support

Most GRAs and GTAs are 9-month appointments during the academic year. Continuation of stipend and tuition remission in the summer can take three different forms depending on where the financial support is coming from. Regardless of where support comes from, all students should enroll in 5 credits during the summer session to be considered full-time students and avoid Medicare and Social Security taxes, along with potential student loan payments.

1. GRA – Tuition remission occurs like it does during the academic year. Stipend remains the same.
2. Fellowship – depends on the nature of the fellowship.

Paychecks are delivered to the department office on the last working day of the month or direct deposited based on banking information provided by the student.

Scholarships are sometimes available from University funds to supplement the stipends of selected incoming graduate students supported by teaching or research assistantships. These scholarships are awarded on a competitive basis for one year and are not renewable.

If a student's grade point average (GPA) falls below a 3.0, the major professor, the department Associate Department Head, and the Graduate Studies Committee will be notified by the

Graduate School. Failure to restore the GPA to a 3.0 in subsequent terms may result in dismissal from the graduate program.

Competitive Pre-doctoral Fellowships. New graduate students in a Ph.D. program are eligible to apply for National Science Foundation and Hughes Foundation Fellowships. Other fellowships are also available, and information regarding applications can be obtained from the major professor, the Department Head, or the Graduate School. All entering doctoral students are encouraged to apply for extramural funding.

### **BPP Credit Requirement for Graduate Student Assistantships**

All students on GRA or GTA appointments are required to enroll for 16 credits in Fall, Winter and Spring terms, and 5 credits in the Summer term. In general, formal classes will not normally exceed 2-3/term for graduate students. The remaining credits are to be filled with a combination of Departmental Seminar (1 credit) (Bot 507 or 607) and either Research (Bot 501 or 601) or thesis credit (Bot 503 or 603). Research credit should be selected when the research activity is unrelated to the thesis project (e.g., rotation project); ALL THESIS RESEARCH ACTIVITY SHOULD BE ENROLLED UNDER BOT 503 OR 603. When enrolling for research or thesis credit, enroll for the section in which your major professor is listed as the instructor of record.

Graduate tuition is not waived by OSU. For students on a GTA, tuition will be paid by the department. For students on a GRA, tuition is the responsibility of the major professor; stipend and tuition can be paid on the same index or paid separately from different indices.

Both research and thesis credits may be appropriate in some terms. Reading and Conference courses (titled or untitled, Bot 505 or 605) also can be part of the 16 credits. PLEASE NOTE THAT GRADUATE STUDENTS SHOULD NOT ENROLL FOR **MORE** THAN 16 CREDITS, BECAUSE ADDITIONAL TUITION AND FEES WILL BE THE FINANCIAL RESPONSIBILITY OF THE STUDENT.

The Office Manager and/or Human Resources Specialist monitor credit hours of graduate students with assistantships. Continuation of an assistantship to the next term will be dependent on the requirement being met for the current term.

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Adopted by vote of professorial faculty on 3 June 1996.

Minimum and maximum credit limits updated per 1996-97 Graduate Catalog, p. 18.

### **Departmental and University Seminars**

Departmental Seminars. Weekly seminars are held in the department on Thursdays from 4-5pm during the academic year. Speakers include departmental faculty and graduate students, and speakers from outside the department (both on- and off-campus). These seminars usually consist of a formal presentation which is followed by a question-and-answer session that

students are encouraged to participate in. Topics incorporate the breadth of scientific sub-disciplines represented in the department. Seminars provide a forum for exchange of ideas and for interactions among members of the department. Such exchanges are a critical component of graduate education, and provide an opportunity for students to get to know other members of the department. *All graduate students should attend the departmental seminars* and are expected to sign up each quarter for the department seminar (BOT 507 or 607). Do not fail to attend a seminar simply because the specific topic is outside your main field of interest - you might actually learn something if you attend!

University Seminars. The Center for Quantitative Life Sciences sponsors weekly seminars that feature outside speakers. These are typically held on Wednesdays at 3:00 pm. The Ecology, Evolution, and Conservation Biology (EECB) seminar series is a collaboration between graduate students and faculty from Forest Ecosystems and Society, Integrative Biology, Fisheries, Wildlife & Conservation Science, and Botany & Plant Pathology. This cross departmental seminar series, by design, is driven by graduate student interest. Based upon nominations, EECB scientists from OSU and other institutions are invited to give a talk and interact with our community. The main intention is to facilitate cross departmental interactions amongst speakers, undergraduate and graduate students, and scientists who are interested in ecology, evolution and conservation. Seminars occur weekly during Fall and Winter terms. Participants enroll in BOT 507 (seminar attendance) and BOT 599 (paper discussion) for 1 credit each. Other departments and programs at OSU also sponsor regular seminar series and many of these may be of interest to graduate students depending on their areas of specialization. Please subscribe to [OSU Today](#) and check your BPP email for seminar announcements.

## **Policy on Thesis Proposal Seminars/Required Graduate Student Seminars**

Objectives: The purpose of this requirement is to focus the student, advisor, and program committee on the thesis research early in the student's program, and to provide students with an important public speaking and professional development opportunity. In addition, the requirement will provide an opportunity for Department members to become familiar with the planned research, and to provide comment and feedback on the proposed research.

Policy: The thesis proposal seminar is required of all first-year thesis-M.S. and second-year Ph.D. students. Students should work with their advisor, graduate committee members, and other sources to learn how to organize and prepare effective seminars. Seminars should be ~20 minutes in length and allow for ~5 minutes of questions and answers. All members of the students graduate committee should be invited and strongly encouraged to attend the seminar.

Administration: Thesis proposal seminars occur as part of the Graduate Student Research Celebration, which is organized in a conference format and typically held in early May. Students and major professors will be reminded of the event early in the calendar year and will provide a title when requested. The Graduate Student Research Celebration is advertised by the department. A reminder/check-off for the proposal seminar requirement will be placed on the student's annual evaluation form.

Note: Students who are unable to present at the Graduate Student Research Celebration due to extraordinary circumstances (e.g., family or health emergencies), may request to give their thesis proposal seminar at another time and date with approval of the Graduate Studies Committee.

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*Approved by vote of the faculty 03Oct2024*

## **The Botany and Plant Pathology Graduate Student Association (BPP GSA)**

The GSA is comprised of all graduate students in the department. In past years, it has been a strong and positive force in developing a close working relationship among students and faculty. The GSA sponsors several social activities throughout the year, including an active orientation program for new students. The GSA also has representatives who are able to participate in departmental committees. Funding for GSA-sponsored activities is from profits made from coffee room proceeds, merchandise sales, and private donations.

“By-Laws” of the Botany and Plant Pathology Graduate Students Association. Ratified June 2019.

### **I. NAME**

The name of this organization shall be the Botany and Plant Pathology Graduate Student Association (BPP GSA).

### **II. PURPOSE**

The purpose of this organization shall be to:

1. Represent graduate student opinion in an organized fashion at the department, college, school, or university level,
2. Assist the faculty in departmental matters,
3. Provide graduate student representation for university-wide student organizations when needed,
4. Select graduate student representatives for departmental, college, school, or university committees as needed,
5. Provide assistance to and orientation for new graduate students and their families,
6. Promote social activities for the students, staff, and faculty of the Department of Botany and Plant Pathology,
7. Assist in promoting participation in intramural and intradepartmental sports and recreation activities,
8. Promote the presentation of student research at professional meetings by appropriately providing travel grants to graduate students,
9. Participate in other affairs as deemed appropriate by the members.

### **III. MEMBERSHIP**

All graduate students in the Department of Botany and Plant Pathology who are registered for a minimum of 3 credit hours, shall be voting members of the GSA.

Full membership shall be extended to specifically include those students who are working in laboratories in the Department of Botany and Plant Pathology, and whose major professors have their primary appointment in the Department of Botany and Plant Pathology, but who are

obtaining degrees in other interdisciplinary programs. [Passed 8 November 1990 by unanimous decision, revised April 2017] Undergraduate majors and post-doctoral students in Botany and Plant Pathology, and students in other departments who are working in laboratories in the Department of Botany and Plant Pathology and whose professors have their primary appointment in the Department of Botany and Plant Pathology, may participate as non-voting members. [Passed 29 April 1993]

#### IV. EXECUTIVE COMMITTEE

Amended 12 April 2017: Elected officers of the Executive Committee shall be the President, the Vice-President, the Treasurer, the Webmaster, and the Outreach Chair. The President, Vice-President, and Treasurer shall be authorized signers on GSA accounts.

*The duties of the President shall be to:*

1. Moderate meetings of the Association,
2. Serve as the chair of the Executive Committee,
3. Call special meetings in concurrence with the other members of the Executive Committee.

*The duties of the Vice President shall be to:*

1. The Vice President shall become the President should a vacancy occur during the term of office,
2. Perform the duties of the President in their absence,
3. Assist the President in the performance of their duties,
4. Notify members and the department of social activities put on by the GSA [Amended April 2017],
5. Document GSA activities through photography or videography and send to the Webmaster to put on the GSA website [Amended April 2017].

*The duties of the Treasurer shall be to:*

1. Deposit funds and write checks on GSA accounts as needed by the GSA,
2. Maintain records of GSA financial transactions, manage the yearly budget, and report a budget summary to the GSA during each regular meeting,
3. If not applying for an award, chair the Travel Grant Selection Committee. [Passed 29 April 1993; Amended 12 April 2017],
4. Manage the merchandise inventory and sales [Amended April 2017].

*The duties of the Webmaster shall be to:*

1. Record the minutes of each meeting,
2. Publish the agenda of each meeting in advance,

3. Handle any correspondence or other communication related to GSA business,
4. Maintain and update GSA and BUDS Websites [Amended 12 April 2017].

*Amended 12 April 2017: The duties of the Outreach and Professional Development Chair shall be to:*

1. Act as a liaison between GSA members and the university and surrounding community outreach opportunities,
2. Keep the designated outreach activities in proper functional condition, in a place known to all outreach participants,
3. Recruit GSA members for said outreach opportunities,
4. Maintain GSA branded poster tubes for professional development,
5. Find outreach and professional development opportunities appropriate for GSA members and disseminate information about said opportunities in a timely manner.

Amended 12 April 2017: Change of Officers – Immediately after the Spring Term, the OSU Foundation and the Oregon State Credit Union shall be notified of the new Executive Officers, who shall become the new authorized signers on all accounts. The old officers will relinquish these responsibilities and pass on documentation and expectations to new officers.

## V. ELECTIONS

1. Amended 12 April 2017: Elections of the officers shall be held at an Association meeting during the Spring Term of each school year. Newly elected officers shall assume their duties in the following Term at which they are elected and continue through to the following Spring Term.
2. Special elections will be held at the earliest possible opportunity to fill vacancies or unexpired terms of the other Executive committee members
3. Recall of any Executive Committee officer may be requested by a majority vote at any official meeting. If the motion for a recall vote passes, the agenda shall be postponed and the meeting adjourned. A subsequent official meeting for such a vote shall be held within a period of not less than seven nor more than fourteen days after the motion for a recall vote was passed. A 2/3 vote at this meeting is required for the removal of the officer.

## VI. MEETINGS

1. At least one regular meeting shall be held each term (Fall, Winter, Spring), and a meeting shall be held during the Summer Term if enough students are able to attend.
2. Special meetings for discussion, urgent business, or elections may be held at any time.
3. All meetings shall be scheduled and agenda items prepared by the Executive Committee. The agenda shall include any items requested by any member. Notice of the



meetings and proposed agenda will be published or posted at least four school days prior to such meetings.

4. Robert's Rules of Order Revised shall be loosely interpreted and used as a parliamentary guide for meetings. Exceptions shall be made as indicated within these by-laws.
5. A majority shall be interpreted as a simple majority of voting members present at a given meeting or vote.

## VII. COMMITTEES

Standing committees and ad hoc committees shall be established by the Executive Committee and/or the GSA membership. The Executive Committee shall appoint committee chairmen by majority vote, except where the committee has been established and the chair selected by a majority vote at an Association meeting.

## VIII. FACULTY ADVISER

A faculty adviser may be selected each year at the Spring election to act as an Association adviser and as an ex-officio member of the Executive Committee.

## IX. AMENDMENTS

The bylaws may be amended by a 2/3 vote of the Association members present at an official meeting. The agenda shall include any amendments to be considered at that meeting.

[Amended 12 June 2019]: Proceedings involving proposals, amendments, and revisions to the by-laws shall be archived and publicly available.

## X. HALSE-KENTULA TRAVEL AWARD

[Amended 31 May 2018] The Halse-Kentula Travel Award was endowed in 1977 following a donation from Richard Halse and Mary Kentula to support graduate student travel.

1. Amended 12 April 2017: The GSA has funds available to assist graduate students in presenting their research at professional meetings, conferences, [Amended 12 June 2019] training, workshops, and other professional development activities that may be evaluated by the Travel Grant Committee. The source of funds for travel grants are fundraisers (merchandise sales, the graduate student silent auction), and other sources. Funds are deposited in the GSA general account at the Oregon State Credit Union. All awards from the GSA General Account are matched by at least one award from the Endowment housed at the OSU Foundation as funds allow. The endowment is managed by the OSU Foundation and was opened by the GSA in 1977.
2. Contributions to the Halse Kentula Travel Award (OSU Foundation spendable account) will be accepted from any source and will become part of the general fund unless the funds are designated for an individual(s), these monies will not be considered as part of

the general fund. Any individual receiving specifically designated travel funds will be ineligible to receive general fund grant monies, except as modified by Selection Criterion #6 (see below). In all cases of specially designated travel funds, the student receiving those funds shall notify the Treasurer to ensure that these monies are not spent as part of the general fund.

3. Amended 12 April 2017: Travel Grant Financing – A financial report will be made by the Treasurer to the GSA annually (no later than 31 January). At this time, the GSA will decide how much money, if any (over a minimum operating cost of \$500), will be transferred from the general account at the Oregon State Credit Union to the OSU Foundation endowment account. The OSU Foundation endowment gains on average \$82.00 per quarter (estimated April 2017). On the basis of the financial status of the OSU Foundation spendable account and the general account at the Oregon State Credit Union, the Executive Committee (with the approval of the GSA) will decide annually the amount of money available for travel grants, and the number of granting periods this money will be available.
4. Amended 12 April 2017: The evaluation of Halse-Kentula Travel Award applications shall be performed by a Travel Grant Committee. This committee shall consist of an Executive Committee-appointed non-interest group of four voting members of the GSA. The Treasurer will serve as Committee chair and organize the members of the committee unless they have a travel grant application pending. Members of the Travel Grant Committee should be from a variety of scientific disciplines. If the Treasurer is unable to be the Chairperson of the committee, one member of the committee shall be appointed Chairperson of the Committee. The Treasurer or Chairperson shall be responsible for distributing application forms, receiving completed applications, and for convening committee meetings. The committee will meet to evaluate pending applications immediately after the application deadline. The committee shall decide how travel grants will be allocated from the funds available to the GSA. [Amended 12 June 2019]: Maximum grants will be \$200. If two or more persons qualify equally for travel grant money, the money shall be divided equally between those persons.

Applications should be evaluated using the following criteria:

1. The person must be a voting member of the Botany and Plant Pathology Graduate Student Association [passed 29 April 1993].
2. The person will present a paper or display at a professional meeting.
3. The person closest (in years) to graduation will have priority over a student with other opportunities to present a paper.
4. Master's candidates may receive only one GSA travel grant per degree. Doctoral candidates may receive up to two GSA travel grants per degree.
5. Meetings out of this region shall have priority over regional meetings for which University cars are normally made available.
6. Any person receiving monies from other sources shall receive from the GSA no amount in excess of the difference between the estimated travel expense and the total monies from sources other than personal funds.

7. The following are expenses for which the Halse-Kentula Travel Award is available:
  1. Airfare, carfare, and other directly related travel expenses.
  2. Hotel or other necessary accommodations.
  3. Registration fees and other related costs associated with a conference or meeting.
8. [Amended 12 June 2019]: Awards should be used within one calendar year from when they were awarded. If changes arise for the use of funds (e.g. if the funds are to be used for a conference or professional development event that was not included on the grant application of the awardee), the awardee should appeal the change via a letter to the Travel Grant Committee. Appeals will be considered on a case-by-case basis and should be within the scope of the award's intended use. No more than one Halse-Kentula Award may be used by the same person for a single professional meeting, conference, or professional development activity.

#### XI. [Amended 12 June 2019] GSA INVITED SEMINAR

In the event that the GSA is given support to host a visiting scholar, the GSA will hold a nomination and select said speaker by a simple majority.

[Amended 12 June 2019] In accordance with the Botany and Plant Pathology Diversity Statement, the GSA encourages the nomination and invitation of scholars from underrepresented and minority groups.

#### XII. [Amended 12 June 2019] UNDERGRADUATE SHOWCASE OF BIOLOGICAL AND ECOLOGICAL RESEARCH (USBER)

In collaboration with the Botany Club, the BPP GSA may organize this yearly event during the Spring term via the appointed committee. This event is designed to provide undergraduate students with a platform to practice their communication skills by presenting their research or lab experiences in a friendly, low-stress environment. This also provides an opportunity for GSA members to provide feedback and mentor undergraduate researchers. This event is hosted by the GSA and open to the public.

#### XIII. [Amended 12 June 2019] MANAGING THE YEARLY BUDGET

The start of each GSA fiscal year is July 1. A yearly GSA Ledger will be created from a copy of the previous year. The GSA Ledger has budget items, the budgeted amount, and the funding source for different categories. The Executive Committee has discretion over how the yearly budget is managed and altered in order to fit each year's situation. All transactions will be tracked by the Treasurer and archived for the GSA after each fiscal year. A minimum operating cost of \$500 shall be maintained in the GSA General checking account.

As of September 2018, the BPP department gave the GSA its own index number for GSA expenses including but not limited to GSA social gatherings, recruitment expenses, outreach,

invited seminar speakers, and fundraising. The starting budget for this account is \$5,000. This money is not guaranteed and subject to change. Specifically, any amounts of money not used may be deducted from the next year's budget. The GSA index number cannot be used for unapproved items/supplies.

Towards the end of each fiscal year, the Treasurer should meet with the department to confirm the transaction history for the GSA index number.

Changes in Procedure – Any changes in the operating procedure as here stated must be performed under the process of amendment provided in Section IX of the GSA by-laws.

## **Student Organizations, Journal Clubs, and Special Interest Groups**

### Coalition of Graduate Employees

The [Coalition of Graduate Employees](#) (CGE) represents the interests and rights of Oregon State University's graduate employees through the bargaining and maintenance of a fair working contract. They strive to create a community of graduate employees empowered to advocate for collective issues.

### Journal Clubs

Students and faculty often organize to discuss current literature, research interests, and individual research projects. This department and other departments involved in the life sciences have clubs and groups that focus on such areas as genetics, ecology, systematics, plant pathology, and plant physiology. Students should contact the appropriate programs or consider initiating a journal club reflecting their own interests.

### Special Interest Groups

Students and faculty interested in specialized areas have opportunities for participation in a variety of campus and academic activities. The following is a brief list of groups that may be of interest to graduate students. Information on other groups and activities can be found in the University catalog and from the MU Activities Office.

Biology Graduate Student Symposium – Each winter a research symposium is held in Corvallis, in which graduate students in science departments, including Botany and Plant Pathology, Integrative Biology, Forestry, Entomology, and Biochemistry, present brief talks describing their work. All students are encouraged to participate.

Sigma Xi – A national scientific honor society that sponsors lectures and symposia, publishes the journal, American Scientist, and provides limited travel and research funding for member graduate students. Membership is by invitation.

Women in Science – [Women in Science](#) provides support and resources for women in science at Oregon State University, particularly graduate students, research assistants, and early-career faculty members. Activities include meetings with featured speakers, networking, and workshops on topics relevant to women in science. We continually collaborate with other “Women In” groups on campus to promote diversity and inclusivity in science and other related topics.

Office of International Services sponsors many [different programs](#) to help international students feel welcome and form community in Corvallis.

## Departmental and University Services

**Department Services** The department offers various services. Additional information can be obtained from the department office or by calling extension 7-3451.

The department office is open Monday through Friday, 8:00 a.m. to 5:00 p.m. not including the noon hour. The office is not open on university holidays.

Supplies. The department office carries a limited supply of paper, pencils, pens, tape, etc. to be used only for teaching activities within the department. Research supplies are to be obtained through your major professor or their Faculty Research Assistant (FRA) or Research Associate (RA). Because the office supplies approximately 200 people, you are encouraged to be conservative in the quantities you take. Storage space is limited and is not conducive to carrying a large inventory. Departmental letterhead is to be used only for official business; if in doubt on this point, seek advice from your major professor. Use for personal purposes such as expression of opinion about university issues is specifically prohibited.

### Building Access and Keys.

For issues with access, office space, or shared equipment, contact the Building Manager [blaine.baker@oregonstate.edu](mailto:blaine.baker@oregonstate.edu)

Cordley Hall is unlocked during normal business hours. After hours and on university holidays, access is via ID card. Card readers are located at the northwest and center west entrances. More entrances will be added when East Cordley opens.

Office and Lab Keys are issued when you arrive. You will receive an email with instructions when your keys are ready. Ask your PI to make a request if other keys are needed.

Shared equipment rooms, the Dirt Lab, and the Mailroom have punch-code locks. These are unlocked during normal business hours. Each research lab has a code that allows access after-hours.

Teaching Labs have punch-code locks. The instructor can provide codes to teaching assistants for access.

Meeting rooms are accessed with keys. Each lab group has a key, and you may also borrow a key from the Main Office.

Greenhouse keys are issued by the greenhouse manager, see the greenhouse section of this document.

Copying Machine. Copy machines are located in Cordley 2605 and may be used by anyone during office hours, but priority use is for Administrative and teaching staff.

## Campus and U.S. Mail

Campus mail is picked up and distributed once per day. Outgoing mail should be in the outgoing mail tray in the mailroom by 10am each day. All mail or outgoing packages need the proper form attached with an Index code. Large, heavy, or more than 3 packages need to complete a parcel pick up request to alert the campus carrier ahead of time <https://printmail.oregonstate.edu/webform/campus-parcel-pickup-request>. Packages with hazardous materials (including dry ice) must be sent in-person from the EH&S Annex. The manila Campus mail envelopes are kept and recycled in the office-mail room. Incoming mail is generally distributed by 2pm.

Please use and give out our correct mailing address (below) on (Your Name)

OSU Botany  
ATTN: Your Name  
2701 SW Campus Way  
Oregon State University  
Corvallis, OR 97331

\*If the shipper requires a room number, only use the main office's number: Cordley 2503

The department office provides paper and envelopes for business mail. In addition, information is available on various parcel services such as FedEx and United Parcel Service (UPS).

**Valley Library Research Service** The library [website](#) is very informative.

The departmental library liaison is **Hannah Rempel** (7-9902, e-mail: [hannah.rempel@oregonstate.edu](mailto:hannah.rempel@oregonstate.edu)). She is available to orient you to the library through a guided tour or scheduled appointments for research consultation.

The library offers many services for graduate students, including various workshops; contact **Hannah Rempel** at 7-9902 for information.

**Articles** Many databases and e-journals can be accessed remotely by OSU faculty, staff and students on the library [website](#). Contact the Library Reference Desk, for more information.

**Interlibrary Loan** is offered to OSU faculty, staff, and students, obtaining materials from other libraries in the state and around the world. The Interlibrary Loan Office is located in Room 237 (main floor) and is open Monday through Friday from 8:00 a.m. to 5:00 p.m. Call 7-4488 for more information.

**Statistical Consultation Service** Each quarter the Statistics Department hires graduate students in statistics to work with people requiring assistance with statistical analyses. This service is available, free of charge, to OSU students, faculty and staff. The service will assist you in:

designing a study, formulating a statistical model, determining the type of analysis that should be done, advising on statistical software, and critiquing your interpretation of analysis. The consultants will NOT enter your data into the computer, nor will they do statistical analyses for you. To use the service, you will need to obtain a "Request for Consulting Service Assistance" form from the Statistics Department (Kidder Hall 44, 7-3366). The form asks for a brief description of your research and the specific statistical assistance needed. Additional information (diagrams, scatter plots, summary statistics, computer output, journal articles that use the same analysis you want, etc.) can be attached to the form to help the consultants understand your problem. The group of consultants meets once a week to discuss current projects and be assigned new ones. Once a student is assigned to your problem, they will contact you to set up an initial meeting. A few problems can be taken care of during the initial meeting. Usually, however, the consultant presents the problem to the rest of the consultants at the weekly meeting, and/or discusses it with faculty advisors, before meeting with you again. Occasionally three or more meetings are required.

Requests are assigned on a first-come, first-served basis. The last group of requests is assigned during the meeting of the week before Dead Week; if your request comes in after Monday of that week, it will be held over for the next term.

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## **Departmental Committees**

### Graduate Student Participation

There normally will be one graduate student member on the following committees: Graduate Studies Committee, Curriculum Committee, Awards, Seminar, DEI, and Computing. A nomination for each committee may be requested from the GSA, or a specific student may be requested by the department head to serve on a committee. Students will continue to be involved, as they have been in the past, in promotion and tenure matters, although a graduate student representative will not serve on the Promotion and Tenure Committee. A graduate student representative, usually the GSA vice-president, is expected to attend departmental meetings, as a non-voting representative.

### Functions of Standing Committees

Described below are the salient responsibilities and prerogatives of the standing committees in the Department of Botany and Plant Pathology. By the very nature of administrative organization of the University, the committees function in an advisory capacity, except when authority for decision-making is delegated by the department head. Members and committee chairpersons are currently appointed for a one-year term.

**Curriculum Committee.** The Curriculum Committee is composed of approximately six members, one of whom is designated as chairperson. Appointments are made by the department



chairperson. One member is a graduate student. The several responsibilities of this committee include but are not necessarily restricted to:

(1) detailed study and submission of recommendations to the department head about all matters concerning the courses offered by the department and the curricular organization of those courses whether exclusively administered by the Department of Botany and Plant Pathology or jointly by two or more departments of the University; (2) making effective recommendations to the department head regarding scheduling courses; and (3) representation by the committee chairperson to the College of Agriculture Curriculum Committee. Matters are brought to the attention of the committee by initiative of the committee itself, the department head, or any member of the faculty. One person charged with responsibility for schedule and catalog copy regularly serves as ex officio member.

**Graduate Studies Committee.** The several responsibilities of the Graduate Studies Committee include: (1) evaluation of all applications for admission to graduate programs in the department, and communication of the department's decisions to the Dean of the Graduate School; (2) taking full responsibility for correspondence with applicants and with institutions and departments where prospective applicants may be located; (3) advising the department head on the selection of students to whom Graduate Teaching Assistantships, Graduate Research Assistantships, and other forms of financial aid at the department's disposal should be offered; (4) making recommendations to the department head regarding matters concerning departmental policies and decisions affecting graduate students individually and collectively; (5) providing information to the faculty and graduate students concerning opportunities for Federal fellowships and other forms of financial aid; (6) ensuring that a written report on the status of each student in the graduate program and performance as a GTA or GRA, if applicable, is made once annually; and (7) serving as a hearing panel on personal grievances and requests for special counsel brought to its attention by any graduate student or member of a graduate student program committee, and making effective recommendations to the department chairperson regarding settlement of such grievances and requests. This committee normally is composed of six to eight persons, one of whom is a graduate student. The chairperson is designated by the department chairperson.

**Promotion and Tenure Executive Committee:** Five tenured full professors of the regular faculty comprise the Promotion and Tenure Executive Committee. The members serve three-year terms and are elected by the voting professorial faculty. The function of this committee is to organize the activities of the full Promotion and Tenure Committee that consists of all tenured professors in the department. The activities of the P&T Committee include making recommendations to the department chairperson, annually, regarding promotion of department faculty members in academic rank and advancement to tenure status, evaluating teaching of professors and mentoring assistant and associate professors. Dossiers forwarded to the appropriate deans include the independent recommendation of the department chairperson and the recommendations of this committee. The Department Head appoints a Student Committee that assists the P&T Committee by providing an independent evaluation of the teaching efforts of professors under consideration for promotion. Catherine Mullins-Rodriguez provides administrative support for the committee.

**Infrastructure Committee:** A committee of faculty members each representing one of the following focus areas: farm, space, facilities and equipment, greenhouse, computers.

**Awards.** Comprises three faculty members, an FRA/RA/Postdoc, and a graduate student, and is charged with soliciting and preparing nominations for college, university, national and international awards.

**Seminar.** Committee comprises three faculty members, one FRA/RA/Postdoc, and one graduate student. Each faculty member leads the organization of the seminar series for an academic term including solicitation of nominations for speakers. FRA/RA/Postdoc and graduate student members facilitate the nomination of FRA/RA/Postdoc and graduate student selected speakers, respectively, by soliciting nominations from their peer groups. They should each nominate a minimum of one per year but may nominate as many as one per term. Kimberly Callahan provides administrative support for the committee.

**Diversity, Equity, and Inclusion.** Open to all departmental members and is charged with developing and advancing departmental DEI priorities. Chairperson is selected by the Department Head.

**Extension and Outreach.** Open to all departmental members and is charged with developing and advancing departmental Extension and Outreach priorities. Chairperson is selected by the Department Head.

**Computing.** Comprises two to three faculty members, one FRA/RA/Postdoc, and one graduate student, and is charged with advising the department on research and teaching computer issues associated with University IT, COSINE, and the CQLS biocomputing cluster. Chairperson is selected by the Department Head. Nathan Nolte provides administrative support for the committee.

**Departmental Executive Committee:** The chairs of each of the preceding committees along with the Associate Chair and Office Manager will form this committee. The role of the Departmental Executive Committee is to advise the Department Head on a variety of issues, raise additional issues and to keep each other informed of ongoing committee business.

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## Laboratories and Facilities

### Herbarium

The Oregon State University Herbarium is located in 2512 Cordley. The OSU Herbarium supports learning, discovery, and engagement by obtaining and curating our state's most comprehensive collection of plants, fungi, lichens, and algae from around the world, with a geographic emphasis on Oregon and the Pacific Northwest. Our resources are used at OSU,

across Oregon, nationally, and globally to create knowledge and solve problems. Curation and research in the collection fosters leadership and science-based expertise in our students, preparing them for service in natural resource and data management positions worldwide. We enrich communities across Oregon through our plant identification services, outreach and training sessions, and through our partnership with OregonFlora. If you are interested in using the herbarium for your research please contact: [Aaron Liston](#), Director; [James Mickley](#), Curator; [Jessie Uehling](#), Curator of Mycology.

## Greenhouses

Greenhouses are available and equipped for most uses. Facilities available to qualified faculty and students include table space in temperature-controlled hallways and rooms, potting soil, soil mixers, pot/soil pasteurization cart, pot/root washing station, soil autoclaves, and a drying oven. All BPP greenhouse space is in the West Range and there are 15-1/2 rooms assigned to Botany and Plant Pathology faculty and staff. If a faculty member you are working with doesn't have space, you should contact our liaison between BPP and Greenhouse Operations, Aymeric Goyer, who will facilitate space requests. You can often find someone willing to loan their space. Space assigned to faculty in other departments can sometimes be used with their approval. In addition to greenhouses, there is limited lathhouse and screenhouse space outdoors which some faculty members currently use.

As a general greenhouse policy, all graduate students are expected to contact the greenhouse office when beginning to work in greenhouses. An initial visit is necessary for familiarization of basic facility policies on environmental control, space use assignment, right-to-know act of 1985, building maintenance, etc.

The greenhouse facilities are run by manager, **Lydia Graber** (7-2381), and several technicians. There are also student workers and resident interns to take care of upkeep, watering, and miscellaneous duties. All greenhouse users are required to take a short online training on greenhouse Workers Protection Standards (WPS). This training is mandated by the Environmental Protection Agency. Training is offered monthly and must be taken once a year. Routine services which are performed by greenhouse personnel include watering, biocontrol applications, pest scouting, grow light repair, and pesticide applications. Each user is, however, ultimately responsible for keeping an eye on his/her own plant material for pest build-up and proper care. Greenhouse users are not allowed to apply fungicides, or other pesticides, without approval and training by Greenhouse Operations. An applicator license is also required. Fertilizer application is the responsibility of each user. The staff are more than willing to help with problems and day-to-day care when asked.

In addition to State-run greenhouses, the USDA Horticulture Crops Research Labs have limited greenhouse and screenhouse facilities for use by USDA employees and their students.

On greenhouse grounds in the West Range, there are at least ten growth chambers used by faculty in the Botany and Plant Pathology Department. These are used most of the time. There

are also many growth chambers which are assigned to members of Crop Science and other departments. As with assigned greenhouse space, use of growth chamber space can often be arranged with the faculty member in charge. Limited space is also often available in controlled environment rooms on the 3<sup>rd</sup> and 4th floor of Cordley Hall. Contact your major professor regarding access to environmental rooms.

### **OSU Plant Clinic**

The OSU Plant Clinic, directed by ***Mana Ohkura***, is in room 2614 of Cordley Hall. The Plant Clinic is a diagnostic facility in support of the OSU Extension Service. The Clinic is open 8:00 AM to 12:00 Noon. Samples of diseased plants are received primarily from County Extension agents, representatives of agriculture-oriented companies, nurseries, and other commercial crop growers and home gardeners. The Clinic will also diagnose problems with plants used for research. Stop by the Clinic for information on what constitutes an appropriate sample and other details. There will be a charge for most services provided by the Clinic.

### **Field Laboratories**

The primary research Field Laboratory for most members of the department is located about 1/2 mile east of Corvallis on the north side of Highway 34. In most instances, arrangements for using land and/or performing experiments will be made through the student's major professor. On the occasion when a student resolves the problems of paying for land rent and acquiring previously established plants, such as trees, arrangements for using the field lab space should be made by contacting the Field Lab Manager, ***Jared Powell***, at 7-3435. Questions concerning facilities and equipment at the Field Lab should be directed to the manager.

Some things to keep in mind:

1. Rent is charged to the user for all reserved land. An annual fee is charged for land use and additional fees are added for application of chemicals, e.g., herbicides and fungicides.
2. Various kinds of equipment are kept at the Field Lab. No equipment should be used nor should any experiments be performed without first contacting the manager.
3. Clean up after doing any work. Don't leave anything behind when you leave. The farm crew does not have time for this type of work.
4. Do not borrow any tool or item of equipment without checking it out with the manager. Write down requested information on a provided sheet before taking anything out of the shop or equipment area. Do not use land or equipment used by another research project without asking permission.
5. If something breaks while you are using it, be sure to tell the manager.

6. Each research project has designated one or two individuals through whom all requests for land preparation, irrigation, etc., are channeled to the farm manager. Please review correct project procedures with the major professor.

In addition to the Botany and Plant Pathology Field Lab, students should be aware of other research farms managed through other departments and through the College of Agricultural Sciences. Dan Curry oversees the Corvallis farm units. The Crop and Soil Science Department has three farms. The main research farm is Hyslop Farm, located north of Corvallis about halfway between Corvallis and Albany on Highway 20. The two others are the Schmidt Farm (near Hyslop) and East Farm (near the Botany and Plant Pathology Field Lab). The Agricultural Experiment Station has other field research areas throughout the state.

The Horticulture Department has two research farms. The vegetable research farm is near the Botany and Plant Pathology Field Lab. The Lewis-Brown Horticulture farm, which is involved primarily with fruits and turfgrass, is located southeast of Corvallis, about one mile south of Highway 34 on Peoria Road near the USDA Germplasm Repository.

As with the Botany and Plant Pathology Field Lab, arrangements for use of equipment, land, and facilities at these farms should be made through the major professor and the superintendent/manager at each farm. (Nothing should be used or done at any of the farms without first contacting the superintendent/manager.) The availability of land and facilities at these farms for use by students in the department is dependent on many factors (e.g., available land, facilities and type of project). Project procedures and farm operations will probably vary between farms.

### **Photographic Services**

The University's [Student Multimedia Services \(SMS\)](#) is a full-service multimedia unit, including equipment loan, poster and thesis printing, multimedia support, and video editing and dubbing. SMS is located on the 2nd floor of the Valley Library. Normal turnaround time is about one week. A rush capability exists for an extra charge. Payment may be made with cash, purchase order or with a departmental index number.

### **Microscopy Services**

[The Electron Microscopy Facility](#) (EM Lab) is located in the Linus Pauling Science Center Room 145. The facility houses the following instruments:

- FEI Titan 80-200 TEM/STEM
- FEI Quanta 3D dual beam SEM/FIB
- Helios 650 Dual Beam FEG SEM
- FEI Quanta 600F SEM
- Leica DM 5000-D Fluorescence Microscope

Charges are made for instrument beam time, technical assistance, film, and specimen preparation services.

The EM Lab provides instrumentation, skills, and when necessary, specialized training necessary to visually analyze microstructure of solid biological and physical substances. More detailed information can be obtained at their website <https://emfacility.science.oregonstate.edu/our-facility>

### **Departmental compound and dissecting microscopes**

#### **Please Note: Do not remove any microscopes from the teaching laboratories for any reason!!**

These instruments are dedicated to the instructional laboratories. When classes are not using the microscopes, they must remain in the teaching labs for cleaning, service, and inventory activities. It is the responsibility of the supervising professor, the department's teaching inventory, to provide graduate students with light microscopes.

OSU Surplus Property often has retired microscopes available for purchase.

Fluorescence microscopes equipped for photomicrography are available in several Botany & Plant Pathology laboratories, in the Plant Clinic, and in the Center for Gene Research and Biotechnology. Confocal microscopy is available in the Center for Gene Research and Biotechnology. Scanned tunneling microscopy is available in the Chemistry Department. Infrared, ultraviolet, and acoustical microscopes are not available.

### **Mass Spectrometers**

The Environmental Health Sciences Center, located in the ALS Building, houses both a low- and high-resolution mass spectrometer. Charges for mass spectrometer analyses are \$135 per hour (one-hour minimum) for instrument time and \$120 per hour for data printout and analysis. Mass spectrometry is used for confirmation of chemical structures of unknown compounds and identification of trace organic chemicals because of its sensitivity and specificity. It is often used effectively with other analytical separation techniques such as gas and liquid chromatography. For more information contact **Jeff Morre** at 7-1771.

Flow Cytometry. The Environmental Health Sciences Center maintains a Flow Cytometer.. Pilot studies are available following consultation. Projects are charged from \$25/hr. For more information, contact **Nancy Kerkvliet** at 7-4387.

### **Additional Support Facilities.**

Graduate students should be aware of the following research facilities and/or services that are available on campus.

Radiation Center - A campus-wide research and training facility for the use of radioisotopes and radiation. Special facilities include laboratories for neutron activation analysis. The Radiation Center is located at NW 35th and Jefferson (7-2343).

Radiation Safety Office - Provides information on radiation safety and radioisotope handling and disposal. The Radiation Safety Office is located in the the Oak Creek Building, 3015 SW Western Blvd (7-2227).

Center for Quantitative Life Sciences - Operates a central service facility which includes equipment and technical support for peptide sequencing and DNA and RNA synthesis. The CQLS Biocomputing Cluster is located in Room 3021 in the Ag Life Sciences Building (7-3347).

Environmental Remote Sensing Applications Laboratory (ERSAL) - Involved in development and application of remote sensing to agriculture, resource management, environmental monitoring, and other uses. ERSAL is located in Peavy 280 (7-4951).

USDA/Horticultural Crops Research Laboratory - Personnel associated with this well-equipped facility have expertise in areas of photosynthesis, water relations, flowering, foliar and soil-borne diseases, mycorrhizae, and soil chemistry. USDA/HCRL is located at NW 35th and Orchard Streets (541-738-4020).

USDA/ARS/National Forage Seed Production Research Center - This research facility is located at 3450 SW Campus Way (541-738-4000) and houses an interdisciplinary team of research scientists concerned with improving production practices of forage grasses and legumes grown for seed. Personnel at the Center have expertise in foliar and leaf diseases; disease epidemiology, including modeling and forecasting; forage insect pheromones and plant attractants; weed competition and weed control; seed conditioning, including recovery, cleaning, and purity; plant hormone bioregulation of seed development; plant growth processes and functions as related to increasing seed size and seed number; agronomic and management practices affecting seed yields; and inherited characteristics controlling or influencing seed yield or seed yield components.

US Environmental Protection Agency, Western Ecology Division, Corvallis - This EPA research facility has three organizational sections, namely (1) air pollution effects, (2) terrestrial/pesticides, and (3) hazardous waste/water. Research areas of special concern to plant scientists include air pollution effects on plants, uptake and effects of pesticides on plants, and acid rain effects on crop plants. This is a well-equipped facility. Of particular interest is a unique system to study the uptake and translocation of chemicals by whole plants. The plant's aerial and root environments are continuously assessed and controlled and transpiration and photosynthesis monitored. USEPA is located at 200 SW 35th Street. For information, call 541-754-4418.

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## **Safety Guidelines and Accidents**

The office of Environmental Health and Safety (7-2273) at OSU assists departments in maintaining a safe and healthy university environment for staff, faculty, students, and visitors. They provide training, consultation, and various safety and health services. They help to ensure Oregon State University abides by the regulatory requirements established at the local, state, and federal level.

If you notice any safety issues, please bring them to the attention of the Building Manager [blaine.baker@oregonstate.edu](mailto:blaine.baker@oregonstate.edu).

Contact information, training materials, and many other resources are provided at the EHS website.

ALL labs have safety protocols and procedures. Work with your PI or lab safety managers to learn these protocols. As part of this you will need to complete certain safety training modules. EHS tracks your completion of these trainings. The specific trainings needed will depend on the lab.

There are several steps which you need to follow that will help to ensure a safe workplace.

1. Know the safety rules. Supervisors determine which training is required for the members of their lab group. Most training is done online through OSU Environmental Health and Safety. Be sure to complete your training before you begin working in a lab, greenhouse, or in the field.
2. Use protective devices such as lab coats, safety glasses, rubber gloves, plastic aprons, etc.
3. Do not eat or drink in lab spaces.
4. Material Safety Data Sheets (MSDS's) describe the hazards and safe handling of any chemical you may use in the lab. Copies of these sheets are available here: <https://ehs.oregonstate.edu/osu-internal/sds>. Review MSDS information for any chemical that is unfamiliar to you, before you use it.
5. Know the first-aid that might become necessary. Also, know the location of first-aid kits in your laboratory.
6. Know how to dispose of chemicals and plant pathogens safely. Each lab has a poster and labels that provide instructions and chemical waste disposal. Each lab should have protocols for pathogen disposal.

**Notify your supervisor immediately after any accident and see *Cheryl Hagey*, personnel specialist, for necessary forms. Any accident resulting in injury must be reported to the State Accident Industrial Fund (SAIF) within 24 hours; in the case of injuries requiring admission to a hospital, the report must be made within 8 hours.**