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2023-24

GRADUATE STUDENT HANDBOOK

DEPARTMENT OF PLANT PATHOLOGY

WASHINGTON STATE UNIVERSITY

WELCOME!

To All Graduate Students in Plant Pathology:

It is my pleasure to welcome you to the Department of Plant Pathology and Washington State University! You are joining a department with a distinguished history of excellence in teaching, research, and extension. The second Ph.D. degree awarded by Washington State University was by this department!

Information provided in this handbook is intended to help you during your stay at WSU. I encourage you to read it carefully and familiarize yourself with various rules, regulations and procedures pertaining to the graduate program in our department.

At WSU, we strive to provide and sustain an atmosphere of belonging, mutual respect, and a collective belief and conviction to strive for excellence in whatever we do. I encourage you to join this collective endeavor. If you have any questions or are unclear about something, please ask the department staff, your major professor, the department Faculty Graduate Coordinator, and/or me.

We are committed to helping you succeed in your graduate program and achieve your professional goals. If I can be of assistance in anyway, please do not hesitate to contact me. I am available by email and phone, or to meet with you in person.

I encourage you to make every effort to meet with your fellow graduate students, and all faculty and staff as soon after your arrival as possible. Please make sure that you visit the department web site (http://plantpath.wsu.edu). It has a wealth of useful information, including faculty, staff and student listings, and information on current happenings in the department. We offer numerous professional development opportunities and chances to network both at work and in social settings. I encourage you to take advantage of these and I expect your active participation.

If you have questions or need assistance, do not hesitate to contact me (dutoit@wsu.edu). I wish you all the best.

Sincerely,

Lindsey du Toit
Department Chair

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INTRODUCTION

The **purpose of this handbook** is to clarify requirements of the Department of Plant Pathology that co-exist with those of the Graduate School. This handbook is not intended to replace the *Graduate School Policies and Procedures* (GSPP) nor any other University document. Each graduate student should read the GSPP, the Guidelines for Good Practices in Graduate Education and the Graduate Student Code of Rights and Responsibilities along with the Plant Pathology Graduate Handbook in order to understand the requirements set forth for graduation both by the Graduate School and the Department of Plant Pathology. When the Department regulations are stricter than those of the Graduate School, the Department regulations take precedence.

Excerpt from GSPP, Chapter 1.E:
The **graduation requirements** of the Graduate School, which must be met for completion of a graduate degree program, are those published in the Policies and Procedures of the Graduate School in effect at the time of the student's initial admission as a regular or provisional student. Departmental requirements are those in effect at the time the student files their Program of Study If a student is dropped from the University for failure to maintain continuous enrollment, the requirements of the Graduate School are those in effect at the time of re-admission to the Graduate School. Modification of certain aspects of Graduate School policy may be necessary to conform to legislation enacted by the Washington State Legislature.

Please visit the **Plant Pathology website** located online at http://plantpath.wsu.edu for updated information pertinent to the Department.

Graduate Program Administration

The Plant Pathology Graduate Program is governed by official bylaws, approved by the Graduate Faculty in Plant Pathology, the Graduate School, and the WSU Faculty Senate.

Dr. Lindsey du Toit, Department Chair and **Graduate Program Director**, dutoit@wsu.edu

Dr. Hanu Pappu, **Faculty Graduate Coordinator**, hrp@wsu.edu,

Graduate Academic Coordinators:
The CAHNRS Graduate Center facilitates the Plant Pathology graduate program. The Graduate Academic Coordinators (Deb Marsh 509-335-2615, Lisa Lujan, 509-335-9542, Jill Staab, 509-335-0691) are responsible for handling graduate student records, scheduling, and administering certain aspects of the Plant Pathology graduate program described herein. The Graduate Academic Coordinators are available to answer many of your questions regarding the implementation of Graduate School and program policies and procedures.

THINGS TO DO UPON ARRIVAL

Departmental Check-In

Faculty, staff, and students at the Pullman campus are located in four buildings (Clark, ITB, PBS, and Vogel). In addition, about half the faculty, as well as staff and students are located at the four Research and Extension Center locations across the state. See the faculty contact list near the end of this handbook. All faculty and staff in the department are committed to supporting you as you pursue your graduate degree in the Department of Plant Pathology.

- Please introduce yourself to the department Administrative Manager, who'soffice is in ITB 3039, Monday through Friday, with occasional remote work. Please contact the Administrative Manager at 509-335-4852 or @wsu.edu. Obtain your desk assignment from the Administrative Manager, as well as necessary keys for building, lab, office and greenhouse access (optional) NOTE: Some keys require your major professor's approval by email.
- Similarly, students located at the Research and Extension Centers should contact the business office staff at their locations for the same aspects noted above.
- Dr. Lindsey du Toit, Department Chair, is located at the WSU Mount Vernon Northwestern Washington Research and Extension Center, and is available via e-mail at dutoit@wsu.edu, telephone at 360-848-6140, and Zoom if you wish to talk with her. Dr. du Toit makes periodic visits to the Pullman campus.

New Student Checklist

Students were provided a New Student Checklist from CAHNRS Graduate Center upon offer and/or admission: https://cahnrs.wsu.edu/academics/graduate-center/. Please be sure to review the list again to ensure completion of the checklist.

Establishing Washington State Residency for Domestic Graduate Assistants

Pay particular attention to residency requirements and restrictions. **Out-of-state waivers for domestic students on assistantship are guaranteed for one year only.** Several items for the residency application need to be completed within the first 30 days of arrival, so it is important to take the necessary steps now to ensure a successful WA residency application at the 1-year mark. Review the information here: http://gradschool.wsu.edu/establishing-residency/

Important IMMEDIATE steps to establish your residency:

- Change your vehicle registration to Washington State
- Change your driver's license to Washington State (even if you do not drive).
- If you do not have a driver's license in another state, apply for a Washington State ID card
- Establish proof of independence documentation, such as income tax return or permanent full-time employment
- Keep copies of your lease agreement, utilities, phone bills, etc.
- Register to vote in Washington.
- Make sure all supporting documentation is updated to a Washington address, such as bank statements, utility bills, etc.

- Keep your mailing address updated

Employment Onboarding Requirements

Employment onboarding will be done in Workday. For new employees, access to Workday is not available until your appointment in Workday is approved. At this point, the employment onboarding will launch and you will receive electronic notification.

- Complete I-9 Employment Eligibility Verification
- Personal Information Changes
- Manage Payment Elections – such as direct deposit of your payroll
- Complete Federal Withholding Elections (W4 – for tax withholding) – VERY IMPORTANT

Social Security Numbers and Application – VERY IMPORTANT (see New Student Checklist)

Taxes

Questions about taxes should be addressed to the Payroll Office, Tax Compliance Officer, French Administration Bldg, Room 240, or the International Programs Office in Bryan Hall. Professional tax consultants are available throughout the community as well.

All students should contact payroll@wsu.edu if you have any questions when filling out your withholding elections (W4) in Workday. Staff do not advise on how your withholding elections are filled out but can direct you to tools that will help.

International students should visit the WSU Payroll webpage https://payroll.wsu.edu/non-u-s-citizens/ for useful information. International students especially are encouraged to complete the Tax Determination Questionnaire on the website – to help ensure you have the correct amount of taxes taken out each pay period, so you can avoid owing large sums later when you file your taxes.

Required Trainings.

Responsible Conduct of Research (RCR) Training

The Graduate School requires all graduate students on an assistantship complete the web-based Responsible Conduct of Research Training: Responsible Conduct in Research AND Conflict of Interest. **This should be done prior to arrival.** Directions for CITI Training Note: Most agriculture students take the 'Physical Science' module. DO NOT SELECT THE RCR MODULE FOR ADMINS.

Discrimination, Sexual Harassment, and Sexual Misconduct Prevention (DSHP) Training

WSU's statements on Discrimination, Sexual Misconduct, and Sexual Harassment are provided here. DSHP annual training is mandatory for all WSU employees, including graduate students on assistantship. This training is offered online through the WSU Human Resource Services at http://hrs.wsu.edu/dshp.

Cyber Security Training

In accordance with the goals of WSU executive Policy 37 (EP37), graduate students are required to complete the training within six months of the date of hire, and complete the training annually

thereafter. Visit Human Resource Service's Skillsoft Percipio to complete this training. This training is not available until a student's hire is fully processed.

Hazing Prevention Training
Must be completed within the first six months of employment. This training is not available until the hire is fully processed. Visit Human Resource Service's Skillsoft Percipio to complete this training.

GENERAL INFORMATION

Address Change

Please keep your address and emergency contact information updated by going to myWSU. International students are required by SEVIS policy to update **a new address within 10 days of moving.** Please also keep your personal information updated in Workday as well. Workday and myWSU are separate systems and are not linked.

Child Care Center

Full- and part-time childcare for 6-week-old to 12-year-old children for students located on the Pullman campus; call 335-8847. Child Care Resource & Referral Services offers information to all center and family day care homes in Whitman County, call 335-7625, or visit The Children's Center, Room 108.

Compton Union Building (CUB)

Please visit the CUB website for a list of amenities, including wireless internet access, increased student meeting space, an upgraded & relocated home for the Student Book Corporation (Bookie), and a multitude of new vendors. Should you need further assistance, please call 335-9444.

Counseling and Psychological Services

WSU Cougar Health Services offers free and confidential assistance to students with personal, social, and vocational problems. Learn more here. If you have a crisis situation after regular office hours, call: (509) 335-2159.

Email

Once you have been fully admitted, your WSU email account will be activated. WSU policy states a student's WSU email address is the official address for all academic and business-related activities. Please make sure you are checking this email account daily and responding to emails sent to you at your official WSU email address. Your name will also be added to your department's graduate student listserv upon admission – generally using your WSU email address. Questions—contact crimsonservicedesk@wsu.edu.

Equipment

Equipment should not be moved without permission of the person in charge of the equipment.

Facilities

The department provides laboratory, greenhouse, and field plot facilities to conduct research. These are generally assigned by research projects and are under the supervision of the project leader who may also function as the major professor. Students should arrange for the use of such facilities through their major professor.

Orville A. Vogel Plant BioSciences Building (PBS)

Plant Sciences Building (PSB), Clark Hall, and Information Technology Building (ITB)

Starting in summer 2022, the department was moved from its longtime home in Johnson Hall to temporary facilities in Clark Hall and the Information Technology Building (ITB). The Plant Pathology Office is now located in ITB 3037. Students needing desk space in any of the department facilities should see the department Administrative Manager (ITB 3039) once they have obtained a Cougar Card to activate their access to the facility.

C. Gardner Shaw Mycological Herbarium

The department maintains one of the most comprehensive mycological herbaria in the U.S. This islocated in the new Orville Vogel Plant Biosciences (PBS) Building in Rooms B6 and B8. Those wishing to use this resource should consult with Monique Slipher (mslipher@wsu.edu or 509-335-5242).

Owen Science Library (part of WSU Libraries)

Learn about WSU Libraries extensive services here. A comprehensive plant pathology library was recently incorporated into WSU's Owen Science & Engineering Library on the 2nd floor. This is administered by personnel of the University Library system and conducted under the same policies as the central library. It includes a plant pathology collection of over 70,000 reprints collected by personnel of this department over many years.

Research and Extension Centers

The faculty and research-teaching facilities at Pullman, as well as some at the Research and Extension Centers (RECs: Prosser, Puyallup, Wenatchee, and Mount Vernon), are all part of the department. Students at Pullman are encouraged to visit the RECs and become acquainted with the plant pathologists conducting research or teaching classes there. Students are, likewise, encouraged to visit with REC faculty on the frequent occasions when they come to Pullman to lecture, present seminars, participate in student defense or preliminary exams, etc.

Insurance

Graduate students (domestic and international) who are on a paid assistantship are automatically enrolled in the Graduate Student Health Insurance Medical Plan (including dental). Effective dates for this plan are 8/16-12/31 for Fall appointments, and 1/1-8/15 for Spring appointments. No premiums are deducted during the summer months if the policy was in effect during spring semester. Those international students not eligible, will automatically be enrolled in the iSHP health insurance plan and are responsible for the premium. Likewise, those domestic graduate students not eligible are invited to review the Cougar Health Services website for other available options and will be responsible for the related premiums. Health cards, plan information and effective dates can be found at the Cougar Health Services website. The CAHNRS Graduate Center has prepared a **Guide for Using the WSU Graduate Student Health Plans** – available here. You are highly encouraged to consult this guide - intended to help graduate students, especially those not on the Pullman campus, to navigate their health plan in order to get the most benefit.

Dependent insurance is also available through Cougar Health Services, and the student is responsible for that premium; please note that spring semester rates will be higher than fall semester rates because of the summer coverage.

International Programs/SEVIS Information

The International Programs Office of International Students Services is located in Bryan Hall, room 206, phone (509) 335-4508, or email at: ip.globalservices@wsu.edu. **International students are reminded that they are responsible for maintaining their legal status within the country**. If there are any changes to a student's I-20, that student is responsible for reporting the change to the Graduate Academic Coordinator and or your Human Resources Partner (your main office personnel specialist).

All SEVIS information, including required entry and departure documents, is available through the International Programs office.

Library Loans and Services

Research projects often require books, journals, or articles that the WSU libraries may not own, but can retrieve for you from another institution. Interlibrary loans are now done through the web. To learn more about Interlibrary loans or to place a request, please visit their website.

Interlibrary Loan support personnel (509-335-5517) can be found at the Circulation Desk located on the first floor of the new Holland Library or email them at: *ill@mail.wsu.edu* if you have further questions.

By going to their Services link, you can also take online tours and discover many other useful features of the WSU library system.

Mail – U.S. Postal Service

Students who receive any first-class mail at the Department address will be notified by the department Administrative Manager. Mail is picked-up and delivered on weekdays at approximately 10 am. There is a plastic tub in the Plant Pathology work room next to the Administrative Manager's office for outgoing USPS mail, and a plastic WSU mailing services tub for interdepartmental mail. All USPS mail must have the departmental return address on the envelope. International mail over 1" thick or over l lb. must have a green customs sticker attached. When sending interdepartmental mail, you must use a four-digit campus zip code; our department four-digit code is 6430.

Pre-paid and/or pre-addressed envelopes must also be stamped with Department of Plant Pathology address in the return area.

Personal mail should not be sent to or from your university address. There is a USPS mail drop box in front of the French Administration building.

The U.S. Postal Service sorts mail electronically. For the quickest delivery, the complete address should be in capital letters with no punctuation. Mail sent to you at the department should be addressed as follows:

YOUR NAME
DEPARTMENT OF PLANT PATHOLOGY
WASHINGTON STATE UNIVERSITY
P O BOX 646430
PULLMAN WA 99164-6430
Note: Please do not include a building or a room number.

Mail – United Parcel Service (UPS)

If you are receiving a package via United Parcel Service, the sender should address the package as follows:

YOUR NAME
3039 INFORMATION TECHNOLOGY BLDG.
100 DAIRY ROAD
PULLMAN, WA 99164

Mail –Express Shipping

Contact your administrative office for assistance with Federal Express shipments.

Microscopes

The department maintains several microscopes for the teaching program. Please consult with the Administrative Manager before microscopes are used for any purpose or moved.

Motor Pool Vehicle

WSU Motor Pool vehicles are to be used for approved business travel. Requests are made through the CAHNRS Business Center (https://business-center.cw.wsu.edu/motor-pool-procedure-for-cahnrs-travelers/) and should be placed early to ensure availability. A valid driver's license is required along with at least two years' of driving experience, your supervisor's permission and budget code numbers for the use charges. The use of personal vehicles is an exception to policy and must be justified and approved in advance.

Network ID

Your Network ID allows you to login to myWSU (https://portal.wsu.edu/), your WSU email and other WSU resources such as Canvas and Workday. Applicants are sent an email which includes an invitation to create a Network ID and a temporary access code for setting up your network ID and OKTA account (multi-factor authentication). Typically, this email is sent within a day or two of completing the application. If you aren't able to locate the email or if you are having difficulties, email gradschool@wsu.edu. Visit https://login.wsu.edu/login/login.htm?fromURI=%2Fenduser%2Fsettings to create your Network ID.

Notary

Notary services are available at the Office of the Dean of Students, located in French Administration Building Room 134; the WSU Graduate School, located in French Administration Building Room 324; and the WSU Payroll office, located in French Administration Building Room 236.

Office Supplies

Office supplies are intended for teaching and research only and should be requested from the office staff. They are not supplied for personal use.

Parking Regulations

Parking regulations are enforced every day, 24 hours a day, all year. If you have a car and intend to park on campus, you need to purchase a parking permit. You should also pick up and read the Parking Rules pamphlet. Permits and pamphlets are available at WSU Transportation Services located on the corner of Colorado and D Street. Phone: (509) 335-PARK.

Payroll Deductions

Graduate students on assistantships may authorize Payroll Services to deduct the total amount of their residual tuition and mandatory fees (not covered by the tuition waiver) owed **over the first 8** of the 9 pay cycles in the semester. Payroll deduction is an optional service provided at a fee of $8.00. Signup is done via Workday – and must be done each semester. Information and deadlines are available here. Payroll deduction is not available for Summer session term.

Photo Identification Cards - Cougar Card

NOTE: This card is required to obtain access to the Vogel PBS and the PSB.
New students may obtain their Cougar Card in the Cougar Card Center located in the Compton Union Building (CUB), room G60. Returning students will continue to use their previously issued card. The Cougar Card Center is open from 8:00 a.m. to 5:00 p.m., Monday through Friday. A $15.00 replacement fee is charged for replacement cards. For any information or to report lost or found ID cards, call 509-335-CARD or visit their website.

Purchasing

The university makes purchases both on and off campus. Permission should be obtained from the faculty member whose budget you will be using before buying anything. It is not appropriate to make a purchase and then later request purchase authorization or reimbursement. Contact your administrative office for procedures and assistance. Most purchases can be done with a WSU Purchasing Card. Purchases $10,000 and over require assistance of the WSU Purchasing office. Most research supervisors maintain purchasing requisitions for WSU facilities (Central Stores, Surplus Stores, Facilities Services).

You should plan ahead as much as possible for purchasing as variable circumstances such as shipping, product availability, and office staffing could delay receipt of your orders.

Registration

NOTE: See also the Academic Information section of this handbook.
Registration is done online through your myWSU portal. Go to: https://my.wsu.edu/sign on using your Network ID and from there your myWSU portal page will appear and you can register. **Please consult with your advisor before registering.**

Registration from the first day of classes through the 10th day of classes will be assessed a $25.00 late fee. Those registering after the 10th day without prior approval of the Registrar's office, will be assessed a $100.00 late fee. For a listing of available courses for the semester, please visit myWSU or: http://www.schedules.wsu.edu

Student Recreation Center

The Student Recreation Center offers a wide range of activities, including intramural sports, fitness classes, weight training, track, pools and spa. Full-time students become automatic Student Recreation Center members with their payment of tuition and fees. For more information, phone 335-UREC, see their website or visit their campus location on North Fairway Drive across from the university golf course. For information on the Palouse Ridge Golf Course, please visit their website.

The Outdoor Recreation Center is located across from the student recreation center on North Fairway Drive. For questions regarding specific equipment, call 335-1892. The Outdoor Recreation program offers classes, information and equipment rentals for outdoor activities including camping, rock climbing, and various water and winter sports.

Telephones

Any calls outside the local area should be made only for official business, with your major professor's approval, and on his/her telephone, when possible.

For campus dialing:

Calls between Pullman campus phones	5-XXXX or 3-XXXX
Local dialing (from Pullman campus)	Dial 7 for outside line e.g.7-XXX-XXXX (no area code)
Research and Extension Centers (from Pullman campus)	Dial only the last 7 digits

More information on dialing instructions here.

For emergencies, dial 911 from any phone.

Travel

The department reimburses students for travel costs associated with their programs and as approved by their advisors for travel lasting more than 12 hours. All arrangements should be made using the most economical accommodations available.

Spend Authorization / Prior Approval

Prior approval is required for ALL official University travel **outside** of the State of Washington and all Foreign travel in order for the traveler to be eligible:

- To travel on behalf of WSU
- To receive reimbursement for authorized and allowable expenses (see BPPM 95.05)
- For employees, this also is required in order to be covered under WSU's worker's compensation insurance while in travel status.

Once your **out of state** Spend Authorization has been submitted and approved, you may charge your airfare to the CTA card by calling Global Travel at 509-332-1212. Once you return from travel you will submit an Expense Report in WorkDay.

If traveling within the State of Washington, you should seek verbal approval prior to travel. Once your trip is complete, you will simply submit an **Expense Report** in WorkDay to claim your reimbursable expenses (for travel >12 hours).

Please refer to the CAHNRS Travel webpage for more detailed travel information and tutorials: https://business-center.cw.wsu.edu/travel/

For per diem rates: https://www.gsa.gov/travel/plan-book/per-diem-rates

For any questions regarding travel or to get help with submitting your Spend Authorization or Expense Report, please email the CAHNRS Travel Department at: travel.bc@wsu.edu

International Travel Requirement

The required International Travel Registry is an online registration system that provides WSU with a secure means of documenting international travel plans for undergraduate and graduate students participating in not-for-credit travel for WSU-related activities—including graduate research while enrolled in research credits.

Typing

The office staff does not type letters, job applications, resumes, theses, seminar abstracts, manuscripts, etc. for students. You can access all Graduate School Program Forms on-line where you can complete the forms at your computer and then print, if necessary.

Visitors

The department hosts several visitors throughout the year, including scientists invited by the department for job interviews, visiting scientists invited by specific research programs, and graduate students. Students are expected to participate actively and attend receptions, meals, and seminars for these visitors to the department as it is an extremely important part of your professional development. These events may be hosted in the evenings and on weekends.

ASSESSMENT AND LEARNING OUTCOMES

The Department of Plant Pathology is committed to providing a high-quality graduate program at the M.S. and Ph.D. levels. The following Graduate Program Learning Assessment Plan includes a mission statement for the department and the broad objectives that define what we consider to be indicators of an effective graduate program. A variety of data will be collected and compiled annually to assess the graduate programs. The plan for collection of these data is included in this document.

Please note that, in addition to annual evaluations of each graduate student, we also use a rubric for assessing performance on oral preliminary examinations (PhD) and final defense examinations (M.S. and PhD). Each member of the student's committee will fill out a rubric after the examination, and a copy will be maintained as part of the student's permanent file. Copies of the annual evaluation forms and rubric are included in the assessment document.

Plant Pathology Graduate Program Learning Outcomes Assessment

[adopted June 30, 2008]

Overview

The mission of the Department of Plant Pathology is to provide instruction, extension, and research directed toward all aspects of plant diseases, including causes, protection, prevention, and control, as they affect commercial crop and landscape plants in Washington and worldwide. The mission is accomplished by providing quality graduate education, conducting applied and basic research for the state and the scientific community at large, and disseminating information to the public through extension education.

Objectives

To enable students earning the M.S. and Ph.D. in Plant Pathology to understand and apply the scientific method to plant pathological problems, and to develop critical thinking and professional skills needed for successful careers in the public and private sectors at a national and international level. In addition, students earning the Ph.D. will conduct novel research in an independent manner (i.e., with limited input from their major advisor) and be able to interpret and write up their research for publication in peer-reviewed journals.

To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels.

Requirements

For the M.S. degree, students are expected to fulfill all of the academic requirements of WSU, present one seminar (PlP 515) to the Department of Plant Pathology, attend the weekly departmental seminar series during the academic year to learn about plant pathology research and other issues outside of their thesis project, conduct research, and prepare and defend an acceptable thesis under the direction of their major advisor and advisory committee in an oral examination.

For the Ph.D. degree, students must fulfill all of the academic requirements of WSU for the Ph.D. degree, including presenting two seminars to the Department of Plant Pathology (PlP 515), pass an oral preliminary examination after completion of the majority of their coursework, prepare a PhD research proposal, conduct independent, original research, and prepare an acceptable dissertation with oversight

and advising from their major advisor and advisory committee. Successful defense of the dissertation in an oral examination is required.

Outcomes for each of the program's objectives are:

To enable students earning the M.S. and Ph.D. in Plant Pathology to understand and apply the scientific method to plant pathological problems, to develop critical thinking and professional skills needed for successful careers in public and private sectors, the program provides training and coursework to help students develop the following skills:

- Understanding, interpretation, and synthesis of scientific literature pertaining to plant pathology and related disciplines
- Formulating hypotheses; developing experimental designs to test these hypotheses; establishing and maintaining experiments
- Collecting data in an objective way and conducting appropriate statistical analyses
- Interpretation and presentation of research results in oral and written formats
- Presentation of research at professional meetings and local commodity meetings
- Publication of research in peer-reviewed scientific journals and other discipline-appropriate outlets such as commodity newsletters

To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels, the program aims to:

- Attract, retain, and train high quality graduate students.
- Place students earning the M.S. into positions including extension agents, state and federal plant pathologists, instructors at the community college level, support scientists in public or private sector research programs, and Ph.D. programs.
- Place students earning the Ph.D. as leaders of scientific research programs in the public or private sector, including industry, and faculty positions at the University level.

Outcomes Assessment Plan

Data will be collected via several different mechanisms, including application statistics; annual review of graduate students (below); an evaluation rubric (below) for oral preliminary examinations (Ph.D.), thesis defense examinations (M.S.), and dissertation defense examinations (Ph.D.); graduate student exit interviews with department chair; and job placement statistics. Data will be summarized in a report provided annually to the Graduate School. The means by which the specific outcomes will be assessed is detailed in the following table.

Objective 1. To enable students earning the M.S. and Ph.D. in Plant Pathology to understand and apply the scientific method to plant pathological problems, to develop critical thinking and professional skills needed for successful careers in public and private sectors.

Outcome	Data	Source	Collected
1a. Understanding and interpretation of scientific literature pertaining to plant pathology and related disciplines	Course grades in plant pathology classes; rubric completed at oral preliminary exams and thesis/dissertation defense exams.	Faculty teaching plant pathology courses; thesis advisory committee members	Annually
1b-d. Formulating hypotheses; experimental design; establishing and maintaining experiments; collecting data and conducting appropriate statistical analyses; interpretation and presentation of research results in oral and written formats.	Rubric completed at oral preliminary exams and thesis/dissertation defense exams; annual evaluations of graduate students	Thesis advisory committee members; major advisor	Annually
1e & f. Presentation of research at professional meetings[1], publication of research in peer-reviewed scientific journals and other outlets appropriate to the discipline[2].	Annual evaluations of graduate students	Major advisors	Annually

[1] Meetings sponsored by professional societies, government organizations and commodity groups
[2] Examples include trade journals, commodity newsletters, and conference proceedings

Objective 2. To maintain a leadership role in plant pathology and related disciplines at the state, national and international levels.

Outcome	Data	Source	Collected
2a. Attract, retain, and train high quality graduate students	Application statistics (number of applicants, percentage of applicants accepted, GPAs of accepted students)	Plant Pathology Program Coordinator; Graduate School	Annually
2b. Place students earning the M.S. into discipline-appropriate positions, including Ph.D. programs.	Job placement statistics	Faculty advisors; exit interviews with Department Chair	Annually
2c. Place students earning the Ph.D. as leaders of scientific research programs in the public or private sector and academic positions.	Job placement statistics	Faculty advisors; exit interviews with Department Chair	Annually

Evaluation Rubric – Thesis or Dissertation Defense
NOW IN QUALTRICS

PLANT PATHOLOGY EVALUATION RUBRIC: THESIS OR DISSERTATION DEFENSE

Candidate:_____ Degree:_____

Title:_____
_____

Evaluator:_____Date:_____

Criteria	**Poor**	**Competent**	**Excellent**
Understands and is able to interpret scientific literature relevant to research topic			
Demonstrates ability to independently formulate hypotheses, develop experimental design, and establish and maintain experiments			
Demonstrates ability to collect data and conduct appropriate statistical analyses			
Demonstrates ability to defend research methods and interpretation, and to entertain alternative interpretations			
Demonstrates ability to interpret and present research results in oral and written formats			
Demonstrates ability to obtain funding to support professional travel and/or research			

Comments:

Evaluation Rubric – Oral Preliminary Exam
NOW IN QUALTRICS

PLANT PATHOLOGY EVALUATION RUBRIC: ORAL PRELIMINARY EXAM

Candidate:_____

Title:_____
_____

Evaluator:_____Date:_____

Criteria	**Poor**	**Competent**	**Excellent**
Demonstrates familiarity with and understanding of the primary literature relevant to the discipline			
Able to synthesize knowledge from courses and primary literature and apply this to a novel research question			
Demonstrates breadth of understanding of scientific principles outside of, but relevant to, the field of plant pathology			
Demonstrates ability to answer questions pertaining to understanding scientific problems involving plant diseases, plant pathogens, and emerging methods			
Demonstrates ability to apply the principles and terminology of the discipline to a novel problem			

Comments:

DUE DATE: Friday, March 10, 2023

PLANT PATHOLOGY

Graduate Student Annual Review: Jan 1, 2022 (or starting date) to-Dec 31, 2022

Annual review of graduate students is required by the WSU Graduate School. Each student is responsible for completing Sections A and B, and then forwarding it **via email with a CV/Resume** to their advisor(s) in advance of the review meeting. **The student is responsible for arranging the annual review meeting.** The student's advisor will complete Section C and review it with the student at the annual review meeting. Both parties will complete Sections D, and E (if applicable) **and ensure each has a signed copy.**

Once fully complete AND fully signed, the student is responsible to save the documents as PDF and submit via myWSU:

1. Navigate in myWSU to your **Student Home Page** > **Profile** > **Service Requests** *in the left navigation* > **Create New Request** > select **College of Agri Human and Nat Res Sciences** > select **your Department** > select **Graduate Student Annual Review** *at the bottom of the list.*
2. Add your PDF attachments (annual review, and CV/Resume), add comment if you wish, and **then click the Submit button**.

The service request will route to the Academic Coordinator (Deb Marsh), and she will review and route to your Department Chair for review/approval. Please retain copies of your submission until degree requirements are met.

This form must be typed

Section A. Cumulative Record

Name:	
WSU ID#:	
Term studies began (e.g. Fall 2021):	
Degree sought:	
Degree program:	
Advisor (and Co-Advisor, if applicable):	
Graduate advisory committee members:	
Number of graduate advisory committee meetings since last review:	
Date of most recent graduate advisory committee meeting (1 meeting /year minimum recommended):	
Has your program of study been submitted and approved by the WSU Graduate School? *The POS is due 2nd term for MS students; due 3rd term for PhD students.*	Submitted and approved _____ Submitted, awaiting Graduate School approval _____ Not submitted _____ *If not, indicate when you plan to submit your program of study:* _____
Thesis/Dissertation subject or title:	
Anticipated completion term:	
For PhD students:	
Has dissertation proposal been approved by your committee?	Yes _____ No_____
Have you passed prelims?	Yes _____ No_____ *If not, when do you plan to take your prelims:* _____

Section B. Self Assessment

Summarize your academic progress this past year, including cumulative GPA. Include notice of any 'I' grades (incomplete) on your record (must be cleared within one year).

Summarize your research progress this past year:

1. *What research goals did you propose to accomplish in your last review (not applicable for first year students)?*
2. *What have you accomplished this past year?*
    a. *Discuss your research progress. If your accomplishments did not meet your goals, discuss why.*
    b. *Describe your publications to date. Please list published manuscripts and book chapters, manuscripts in preparation (and expected date of submission), abstracts (professional papers and posters presented).*
3. *What are your greatest challenges and how will you overcome them?*

Summarize your professional activities this past year:

List professional activities such as awards/scholarships, meetings attended, abstracts/papers published, presentations given, professional development, and teaching experience.

Discuss your future directions and goals, both overall and for the next review period:

Attach CV and forward both to your advisor for review. The student is responsible for arranging the annual review meeting.

Section C. Advisor's Assessment

Performance, Skill Ratings	Excellent	Good	Average	Fair	Poor	NA
Academic Performance						
Research Performance						
Work Habits						
Technical Skills						
Rate of Progress						
Communication Skills						
Teaching Performance						
Professional Development						
Overall Rating						

Take this opportunity to review the student's CV and provide suggestions for improvement.

Please provide an assessment of your student's research progress and accomplishments for the current review period (or research potential for a first year student). Comment on the student's strengths and weaknesses and provide specific recommendations or requirements on areas that need improvement. Consider the student's understanding of the scientific literature, recent proposal defense (PhD), seminar performance, and other research benchmarks.

Outline specific conditions or expectations that must be fulfilled prior to the next review and discuss the student's probable success in completing their degree requirements in a timely manner. If the probability is not good, please indicate why.

Section D. Recommendations

Overall assessment is: ____ satisfactory or____ unsatisfactory*

If the evaluation is **unsatisfactory, enrollment should be ___ continued or___ discontinued*

*Conditions or recommendations for continued enrollment if evaluation is **unsatisfactory**:*

Before signing, discuss specific conditions to be fulfilled before next annual review and any differences in progress ratings and expectations.

Signature of Advisor: _____ Date: _____

Signature of Co-Advisor (if applicable):_____ Date: _____

Signature of Student: _____ Date: _____

My handwritten signature above acknowledges this evaluation has been discussed with me. Comments on review by student may be attached.

SIGNATURES ALSO REQUIRED BELOW

Section E. Certification of Assistantship Duties

***If the student served in an assistantship position during the past year**, please have the student review and sign below, along with the student's faculty advisor or supervisor.*

Student: The graduate assistantship position that you have held **during calendar year 2022** and the related tuition waivers were contingent upon factors as outlined in your offer letter. By signing below you certify you have met the following contingent factors for the preceding semester(s) during which you held an assistantship (check all that apply:

Specify which terms you received waviers for: ( ) Spring 2022 ( ) Summer 2022 ( ) Fall 2022

- I remained enrolled full time (at least 10 *[3 cr in summer]* credits as defined in Graduate School policy manual, chapter 9) during the period of the appointment.
- I maintained a 3.0 cumulative GPA during the period of the appointment (or approved exception to policy)
- I met the service requirement of an average of 20 hours per week for 0.5 FTE as scheduled by my department/supervisor (or based on hours required for partial FTE appointment).

_____ _____

Student Signature Date RA Advisor **or** TA Supervisor Signature Date

ACADEMIC INFORMATION

Academic Calendar

The Academic Calendar provides relevant deadlines for registration, fees, applications, enrollment, and exams.

Academic Integrity

As an institution of higher education, Washington State University is committed to principles of truth and academic honesty. All members of the university community share the responsibility for maintaining and supporting these principles. When a student enrolls in Washington State University, the student assumes an obligation to pursue academic endeavors in a manner consistent with the standards of academic integrity adopted by the university. To maintain the academic integrity of the community, the university cannot tolerate acts of academic dishonesty including any forms of cheating, plagiarism, or fabrication. Washington State University reserves the right and the power to discipline or to exclude students who engage in academic dishonesty. To that end, the university has established rules defining prohibited academic dishonesty and the process followed when such behavior is alleged. These rules incorporate Washington State University's Academic Integrity Policy, the university-wide document establishing policies and procedures to foster academic integrity. This policy is applicable to undergraduate and graduate students alike, as it pertains to dishonesty in course work and related academic pursuits. In cases of dishonesty in research and original scholarship, the University's Policy and Procedural Guidelines for Misconduct in Research and Scholarship may take precedence over the policies and procedures contained herein. More information regarding the rules governing academic integrity can be found at the WSU Center for Community Standards website.

Catalog of WSU Courses

The WSU Catalog is found only online. It is used by both prospective and enrolled students to inform them of the courses offered at WSU and the requirements for each degree. It also highlights the faculty research interests.

Course Catalog in Plant Pathology (PL_P)

150 Molds, Mildews, Mushrooms: The Fifth Kingdom 3 A survey of the socio-historical impact of fungi and their role in development and application of the scientific method.

300 Diseases of Fruit Crops 2 Course Prerequisite: BIOLOGY 120, HORT 310, or HORT 313. Comprehensive understanding of the diseases of fruit crops grown in the state of Washington.

301 Food Mycology 3 (2-3) Course Prerequisite: MBIOS 101 or concurrent enrollment, or MBIOS 304 and 305, either with concurrent enrollment. Survey of the fungi important in food production, storage, and spoilage. (Crosslisted course offered as FS 301, PL P 301). Cooperative: Open to UI degree-seeking students.

403 Advanced Cropping Systems 3 Course Prerequisite: HORT 202. Understanding the management of constraints to crop production and quality; biological, physical, and chemical approaches to crop health management. Field trips required. (Crosslisted course offered as CROP SCI 403, CROP SCI 503, PL P 403, PL P 503.) Credit not granted for both CROP SCI 403 and 503, or PL P 403 and 503.

Recommended preparation: CROP SCI 305; PL P 429. Offered at 400 and 500 level. Cooperative: Open to UI degree-seeking students.

429 General Plant Pathology 3 (2-3) Classification, symptoms, causes, epidemiology, and control of plant diseases.

499 Special Problems V 1-4 May be repeated for credit. Course Prerequisite: By department permission. Independent study conducted under the jurisdiction of an approving faculty member; may include independent research studies in technical or specialized problems; selection and analysis of specified readings; development of a creative project; or field experiences. S, F grading.

499 (Effective through Summer 2023) Special Problems V 1-4 May be repeated for credit. Independent study conducted under the jurisdiction of an approving faculty member; may include independent research studies in technical or specialized problems; selection and analysis of specified readings; development of a creative project; or field experiences. S, F grading.

501 Biology and Control of Plant Diseases 3 (2-3) Course Prerequisite: Admission to the Master of Science in Agriculture graduate degree program. Introduction to the biology and control of plant diseases covering disorders caused by fungi, viruses, bacteria, and nematodes.

503 Advanced Cropping Systems 3 Understanding the management of constraints to crop production and quality; biological, physical, and chemical approaches to crop health management. Field trips required. (Crosslisted course offered as CROP SCI 403, CROP SCI 503, PL P 403, PL P 503.) Credit not granted for both CROP SCI 403 and 503, or PL P 403 and 503. Recommended preparation: CROP SCI 305; PL P 429. Offered at 400 and 500 level. Cooperative: Open to UI degree-seeking students.

511 Viruses and Virus Diseases of Plants 3 Nature of plant viruses, vector-virus relationships and virus diseases of plants. Recommended Preparation: MBIOS 503 or equivalent coursework providing a basic understanding of molecular biology. Cooperative: Open to UI degree-seeking students.

512 Topics in Plant Pathology V 1-3 May be repeated for credit; cumulative maximum 6 credits. Concepts of plant pathogen interactions and disease management.

513 Plant Nematology 3 Anatomy and morphology of plant-parasitic nematodes, molecular plant-nematode interactions, genomics, symptoms, identification, techniques and control. Cooperative: Open to UI degree-seeking students.

514 Phytobacteriology 3 Isolation and characterization of bacteria having a saprophytic, symbiotic or pathogenic association with plants, molecular structure, function, and genetics. Cooperative: Open to UI degree-seeking students.

515 Seminar 1 May be repeated for credit.

521 General Mycology 3 The structure, life histories, classification, and economic importance of the fungi. Cooperative: Open to UI degree-seeking students.

525 Field Plant Pathology and Mycology 3 Diverse plant diseases, disease diagnosis and management in fields, orchards, nurseries; interact directly with diverse agricultural stakeholders. Field trip required. Recommended preparation: PL P 429 or PL P 521.

526 Advanced Fungal Biology 4 (2-6) Advanced topics in fungal biology, ecology, systematics, evolution and coevolution via discussions of literature and special laboratory projects. Recommended preparation: Introductory mycology and genetics coursework. Cooperative: Open to UI degree-seeking students.

535 Molecular Genetics of Plant and Pathogen Interactions 3 Genetic and molecular biological aspects of host-pathogen interactions. Cooperative: Open to UI degree-seeking students.

545 Statistical Genomics 3 (2-3) Develop concepts and analytical skills for modern breeding by using Genome-Wide Association Study and genomic prediction in framework of mixed linear models and Bayesian approaches. (Crosslisted course offered as CROP SCI 545, ANIM SCI 545, BIOLOGY 545, HORT 545, PL P 545.) Recommended preparation: BIOLOGY 474; MBIOS 478. Cooperative: Open to UI degree-seeking students.

551 Epidemiology and Management of Plant Diseases 3 Principles of plant disease epidemiology, control and ecology of pathogens. Recommended preparation: PL P 429. Cooperative: Open to UI degree-seeking students.

570 Techniques in Plant Pathology 3 (1-6) Laboratory techniques for isolating, cultivating, and identifying the major groups of plant pathogenic organisms. Cooperative: Open to UI degree-seeking students.

700 Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. Independent research and advanced study for students working on their master's research, thesis and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 700 credit. S, U grading.

800 Doctoral Research, Dissertation, and/or Examination V 1-18 May be repeated for credit. Course Prerequisite: Admitted to the Plant Pathology PhD program. Independent research and advanced study for students working on their doctoral research, dissertation and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 800 credit. S, U grading.

Course Semester Rotation (anticipated)

Course #	Course Name	Coop Status	Instructor	Credits	Term/Rotation
150	Molds, Mildews & Mushrooms: The Fifth Kingdom			3	no longer taught
300	Diseases of Fruit Crops		Rayapati	2	Fall Even Years
301	Food Mycology		TBD	3	no longer taught
403	Advanced Cropping Systems		C. Neely	3	Fall
429	General Plant Pathology		Grove/Pappu	3	Fall
499	Special Problems		arranged	Arr	Fall/Spring/Summer
501	Biol/Control of Plant Diseases *Online—Restricted to MSAG students*		Mattupalli	3	Spring
503	Advanced Cropping Systems	WSU CoOp	C. Neely	3	Fall
511	Viruses & Virus Diseases of Plants	WSU CoOp	Pappu	3	Spring Odd Years
512	Special Topics in Plant Pathology		TBD	V 1-3	Fall/Spring TBA
513	Plant Nematology		Gleason	4	Spring Odd Years
514	Phytobacteriology	WSU CoOp	Friesen	3	Fall Even Years
515	Seminar		TBD	1	Fall/Spring
521	General Mycology	WSU CoOp		3	Fall Odd Years
525	Field Plant Pathology & Mycology		du Toit	3	Summer Even Years

526	Advanced Fungal Biology	WSU CoOp		4	Spring Even Years
535	Molecular Genetics/ Plant & Pathogen Interactions	WSU CoOp	Tanaka	3	Spring Even Years
545	Statistical Genomics	WSU CoOP	Zhang	3	Spring Odd Years, taught by Crop and Soils
551	Epidemiology & Management of Plant Diseases	WSU CoOp	Grove	3	Spring Even Years
570	Techniques in Plant Pathology	WSU CoOp	Pappu/Gleason/ Friesen/	3	Fall
700/800	Research Credits		Advisors	V 1-18	X

Continuing Graduate Study after M.S.

If study beyond the M.S. Degree is planned, the student must have a faculty member in the department agree to serve as their Ph.D. advisor, and submit a letter of application to the Department of Plant Pathology Graduate Admission Committee. If the student is recommended into the Ph.D. program, the Graduate School should be notified using the Add an Academic Program Degree Level form from the Graduate School—facilitated by the Graduate Academic Coordinator.

Degree Sought

Students with a Bachelor's degree are typically considered as candidates for the M.S. degree. In some cases, a student may display a high aptitude for graduate study, have substantial research experience, and be considered ready to proceed directly to a Ph.D. program without first obtaining an M.S. degree. Students with a B.S. applying directly to a Ph.D. program must document research experience by describing the research project(s) with which they were involved. This should include the nature of the research project, duration, supervisor, role and involvement in the project, what was learned from the project, and any publications or conference presentations resulting from the project. The applicant should also include a *Statement of Purpose* that addresses specifically why they want to go directly into a Ph.D. program instead of first completing an M.S. degree, their interests in pursuing a Ph.D., and their career goals. Applicants should have a GPA of at least 3.25. If they are not a native English speaker, test scores of either TOEFL or IELTS must be submitted. GRE scores are not required.

Students in the second year of graduate study working towards an M.S. in Plant Pathology may decide they would rather work directly towards a Ph.D. degree instead of finishing their M.S., if they realize this is a good career goal and their project can be suitably expanded into a Ph.D. project. This option, referred to as a 'by-pass option', is available under some conditions. The student must submit in writing his/her desire to transfer to the Ph.D. program to his/her major advisor, with copies to the Graduate Coordinator and the Department Chair. The request should include the reasons why the student believes she/he is ready to begin study toward the Ph.D. and bypass the M.S. After initial discussion with and approval by the Department Chair, the major advisor will convene the student's thesis committee to discuss the request. To be considered ready for transfer to the Ph.D. program, a student must:

- demonstrate evidence of significant progress in research during the first year of graduate study in which she/he is registered as an M.S. student, and
- demonstrate strong academic performance in graduate-level courses completed at WSU.

The totality of the student's performance in course work, research and other professional activities must be considered by their committee. The committee will then vote; 75% of the committee, or unanimous if there are only 3 committee members, must vote in favor for the student to be recommended for the Ph.D. program. If the Department Chair concurs with the committee's recommendation, the student will be allowed to transfer to the Ph.D. program. The Chair reserves the right to consult with other department faculty to seek input on the request. If the student is recommended into the Ph.D. program,

the Graduate School should be notified using the Plan and Degree Level Change form from the Graduate School—facilitated by the Graduate Academic Coordinator. The student is also required to file a Ph.D. program of study. If the student is not recommended for a Ph.D., he/she will continue completing their M.S. program. Successful transfer from the M.S. to the Ph.D. program does not eliminate any of the requirements for the latter degree as described by the Graduate School or the Department of Plant Pathology Graduate Student Handbook.

Enrollment

All students must remain enrolled continuously unless they have applied (and been approved) for leave status. International students must be enrolled full time. Self-supported domestic students must be enrolled for a minimum of 2 graduate credits. If students are not continuously enrolled, and have not been approved for leave, they will have to re-apply in order to finish their program. For further information, please see Chapter 5 of the Graduate School Policies and Procedures.

Students on assistantships must be enrolled full time (minimum 10 credits) with a recommended average of 10-12 credits per semester. Full-time students must enroll for at least one credit per semester of either Pl P 700 or 800 during the spring and fall semesters.

Enrollment during the summer session is not mandatory. However, if a summer class is needed for a student's program, a minimum of 3 credit hours is required to put the individual on appointment. Should the class be for 2 credit hours, a research credit hour may be used to make up the difference. All summer classes must be within the student's program.

Enrollment in any course not on the Program of Study must be approved by the student's major professor.

Reduced Course Load (RCL) status *may* be an option, particularly for international students who are in their last semester of study in Plant Pathology, if the student is not on assistantship. Reduced Credit Load (RCL) status allows an international student to enroll part-time for the purpose of defense, i.e., less than 10 credits in the Fall or Spring, or less than 3 credits in the Summer. For students requesting RCL for final defense term, all coursework must be finished to be eligible for RCL (unless your final defense seminar is for credit). International students will still be required to pay health insurance. Contact an advisor at the WSU International Programs office in advance of the term for details/criteria, application, and deadlines. Ultimately, students will apply for RCL through http://mypassport.wsu.edu; such requests are routed electronically for approval.

Grades

700/800-Level Research Grades

700-level credit is for students working on their master's research, thesis and/or examination. The 800-level credit is for doctoral research, dissertation and/or examination. Credits are variable and grading is satisfactory/unsatisfactory (S/U). Credit is awarded for a grade of 'S'; no credit is awarded for a grade of 'U'. The S/U grade does not carry any quality points and is not calculated in the grade point average (GPA). **In the event of exam failure, a 'U' grade should be recorded for that semester's 700 or 800 credits. Two 'U' grades for 700 or 800 credits will lead to dismissal from the program.** Faculty should set requirements for each semester that a student is enrolled in research credits and provide an S/U grade at the end of the semester based on the student's performance in meeting those requirements. In extenuating circumstances, faculty may use the 'X'

grade to indicate continuing progress toward completion of those requirements. The 'X' grade should be changed when the faculty member determines that the student has successfully met the requirements for that semester; the 'X' grades should be changed by the faculty no later than the semester of the final defense. Generally, students enroll in a minimum of 2 credits of the appropriate 700/800 level in the semester in which they take their final oral examination.

Incomplete Grades

Students will have up to one year (unless a shorter time is specified by the instructor) to complete work for which they received an 'I' grade; after one year the 'I' grade will become an "F" if not completed.

Good Practices in Graduate Education

Found here, these guidelines provide a code of ethics to be used in creating successful practices for faculty and graduate student interaction. These Guidelines should be read and followed by all students and faculty.

Graduate School Policies and Procedures (GSPP)

Referenced frequently, the Graduate School's Policies and Procedures manual serves as a guide to students, faculty and staff to insure that proper advising occurs, leading to the completion of a graduate degree.

Schedule of Classes

In addition to myWSU Class Search, the web version of the Schedule of Classes (SOC or Time Schedule) lists times and places for all courses offered each semester. Students may find this version easier to review.

Seminar

Seminar is scheduled every Monday at 4:10 PM. All students are expected to attend all seminars unless there is a course conflict. Course conflicts must be approved by the major professor.

Seminar Abstracts (PL P 515)

Each M.S. student must enroll in Seminar (PLP 515) once for their degree and each PhD. student must enroll in Seminar (PLP 515) twice for their degree. See Degree Requirements. These seminar presentations must be on topical subjects other than the student's thesis/dissertation, which have been approved by the faculty member directing seminar for that particular semester.

Seminar abstracts should be sent *electronically* to the Administrative Manager () 10 days prior to the student's seminar in final form for duplication and distribution; the student must also indicate in the message to the Administrative Manager that the abstract has been approved by both their advisor and the PLP 515 course instructor, and copy both on the email correspondence. The following steps will help students with preparation of the abstract:

Write the abstract using the standard format as described in the current year's volume of *Phytopathology*. Please be sure to include course name and #, place, date, and time. (See example on the following page.)

- Consult with your advisor.
- Make corrections or rewrite as indicated by your advisor.
- Consult with the seminar instructor
    - Make corrections or rewrite as indicated by the seminar instructor and return to the seminar instructor for final proofing and approval.

EXAMPLE

TITLE: Investigation of the mode of action of two fungal elicitors, *Fsph* DNase and chitosan, in a mammalian system

Your Name

ABSTRACT:
In plants, non-host disease resistance is the result of the interaction between an incompatible plant pathogen and the plant. For example, an incompatible fungal pathogen of pea plants is *Fusarium solani* f. sp. *phaseoli* (*Fsph*), normally a pathogen of bean. The non-host disease resistance response in this interaction is characterized by the accumulation of about 20 proteins that temporally correlate with disease resistance. A similar pattern of defense protein accumulation occurs in response to certain DNA-damaging agents such as actinomycin D and UV_{260nm} light (6). Chitosan, a ∃-1,4-linked glucosamine, and a DNase are released from *Fsph* during its interaction with pea tissue (1,2). These components elicit pea defense responses (4,6). Moreover, *Fsph* DNase can cause pea DNA degradation *in vivo* (4) while chitosan has been shown to cleave DNA *in vitro* (5). Chitosan has been shown to localize in the nucleus early in the pea-*Fusarium* interaction (3).

In vertebrate cells, one particular response to DNA-damaging agents is the accumulation of the p53 protein (7). P53 is a sequence-specific transcription factor that activates many genes. In turn, these gene products play roles in the processes of cell cycle arrest or programmed cell death (8). We investigated the hypothesis that *Fsph* DNase and chitosan could induce p53 accumulation in a mammalian system. We chose this system to test our hypothesis for three reasons. First, a number of the same agents that induce p53 also induce pea defense responses (6,7). Second, since p53 has been a subject of intense study, there are a wide variety of commercial monoclonal antibodies to follow its accumulation. Finally, in addition to gaining insight on how these elicitors function in the pea system, their activity in an animal system could suggest possible therapeutic value in animals.

By western analysis, we determined that neither *Fsph* DNase nor chitosan were capable of causing p53 protein accumulation at the time points studied in the mouse preneoplastic mammary epithelial cell line, CL-S1. At 36 hrs. similar results were obtained utilizing the human MCF-7 mammary epithelial cell line. Also, treatment of the CL-S1 cell line with *Fsph* macroconidia, capable of excreting high levels of DNase, did not result in p53 accumulation. Immunocytochemistry was used as a supplemental method in determining whether p53 accumulated at 40 hrs. The immunocytochemical data were similar to those obtained by western analysis at 36 hrs. Finally, chitosan did not inhibit the growth of CL-S1 cells in culture. Taken together, these data suggest that *Fsph* DNase and chitosan did not interact with the DNA in either of the two cultured animal cell lines, at least not in a manner consistent with p53 accumulation.

Time - Date - Location
Plant Pathology 515, Semester, Year

PLEASE PUT YOUR REFERENCES ON THE BACK

Student's Progress

The major professor regularly, at least annually, assesses the student's progress during his or her tenure in the department. This applies to maintaining required grades, research progress, and meeting other departmental and university requirements toward fulfillment of degree requirements. Each student will receive a letter annually from the Chair assessing the student's performance. Refer to the annual review form found in the Assessment section of this handbook.

Teaching Experience

The department does not have a formal requirement for teaching experience in any of its degree programs. However, Plant Pathology faculty encourage graduate students to pursue teaching opportunities whenever possible. Such experience becomes an important part of a student's qualifications for teaching positions after graduation. Presenting workshops, extra seminars, or assigned TA responsibilities in the department would constitute such experience.

Time Limitations

Ordinarily, the length of time a student may hold an appointment is limited to 3 years for Master's candidates and 5 years for Doctoral candidates.

Transfer of Graduate Credit Hours

PhD Programs often include transfer credits from the student's M.S. program. Up to ½ of the 34 graded credits for the Ph.D. program can be transferred from another university, which is determined by the Graduate School.

Appropriate credit hours (with a grade of B or higher) earned in other accredited graduate schools may be applied to a limited extent toward an advanced degree; however, they may not be substituted for residence requirements. Acceptability of transfer credits is determined by the Graduate School, not the department. For more information on transfer credit and transfer credit restrictions, see the GSPP's and discuss the requested transfer with your major advisor.

Writing Center

In January 2008, the University's new Graduate and Professional Writing Center (GPWC) opened for business. GPWC features one-on-one in-person consultations, peer groups, and an onsite resource library. For further information, please visit their website. WSU's English 545 (3 cr) Graduate Student Writing Workshop taught by Dr. Elizabeth Siler is also an excellent resource (enrollment is limited, so register early).

MASTER'S DEGREE IN PLANT PATHOLOGY

Major Professor

Each student in the Department of Plant Pathology is chosen by a professor and agrees to be that professor's student. The professor is known as the student's major professor and also functions as his/her academic advisor. The major professor is the chair of the student's advisory committee and supervises the thesis research. The major professor, and most of the student's research program, may be in Pullman or at one of the Research and Extension Centers. Regardless of this, the MS student should be in residence at WSU on the Pullman campus for least one semester.

Master's Advisory Committee

During the first semester, an advisory committee should be chosen. The student, the major professor and the committee plan the student's program of study. The Master's committee must include a minimum of three (3) WSU faculty members including the Major Advisor as Chair. The majority of committee members must be Graduate Faculty in Plant Pathology. At least one member must be tenured or tenure-track Plant Pathology Graduate Faculty; USDA-ARS researchers appointed as WSU adjunct Plant Pathology faculty are entitled to Chair, Co-Chair, or serve as a committee member of graduate student committees. At least one member must be located on the Pullman campus; ***for students whose major advisor is located off the Pullman campus, the Pullman designated committee member will serve as campus advisor while the student is Pullman*** and provide lab space in which to work, if needed. Other individuals internal to WSU serving as Graduate Faculty in their own program or discipline may serve as a committee member with approval of the Plant Pathology Chair. External committee members are approved on a case-by-case basis.

Master's Program of Study

The M.S. program of study form should be submitted no later than the beginning of the second semester of graduate work. ***Please be sure to submit a copy of the completed program form (including all signatures) to the Graduate Academic Coordinator who will file it electronically with the Graduate School via myWSU.*** The program for the Master of Science in Plant Pathology must include:

30 credit hours minimum of total credit

21 credit hours minimum of graded course work, 15 of which must be at the 500-level with a maximum of 6 credit hours of non-graduate 300-and 400-level course work. The program must include at least one credit hour of Seminar (Pl P 515)

4 credit hours minimum of Pl P 700 research credits

The maximum number of Pl P 700 credit hours that may be recorded on the form is 15; you may enroll for more than 15 credit hours of Pl P 700, they just can't be shown on the program form.

Copies of the forms and directions can be found on the Graduate School's 'forms' page.

Front of Program Form: If a definite thesis title has not been decided upon, the general subject area should be reported. Please obtain appropriate departmental and committee members' signatures.

Back of Program Form: The student should supply appropriate information regarding courses taken and proposed, utilizing this handbook, the WSU catalog, WSU academic records, and official transcripts from other institutions. Transfer credit, if requested, should be reported exactly as it appears on the original transcript. Transfer credit hours should be reported in semester hours. All credits should be listed by year.

Master's Thesis

A thesis based on original research is required for the M.S. in plant pathology. The thesis is a scholarly study that is a significant contribution to the knowledge of Plant Pathology.

Thesis and dissertation formatting and submission requirements, in addition to a Word template, are available on the Graduate School website.

The Plant Pathology program requires a draft of the thesis that has been read and approved by the major advisor must be given to all committee members *at least one (1) month prior to the date of your defense. Refer to the Graduate School's 'Deadlines and Procedures for Graduation' for relevant deadlines. Committee members must read, edit, and return drafts of theses to the student within a reasonable period of time. The Graduate Studies Committee recommends that committee members hold drafts for no longer than 30 days.

***Students: Be aware that your committee may require more time to review/comment on your thesis. Communicate with your advisor and committee early in the thesis writing process to establish the specific timelines for your thesis. It is strongly advised that the student call a committee meeting one (1) semester prior to their anticipated defense date to discuss the timeline for the actual defense date, committee members' availability, etc.*

To inform yourself as to the committee's expectations for a successful defense, see the Final Defense Rubric in the Assessment section of this handbook. Talk to your advisor and committee members for any clarification you need.

It is also strongly advised that *the Application for Degree* be submitted at least one semester prior to when the final examination is scheduled so the student can be notified of graduate requirements (to-do lists) before enrolling their last semester.

Final Master's Examination

All students are required to give a **Final Defense Seminar**. The date and time are to be decided after consultation with the student's advisor, but optimal timing is generally a day or two before the defense exam. Sometimes these seminars fit into the regular Monday 4:10 pm timeslot but are often at other times on other days. The non-credit exit seminar will be part of the requirements for graduation and is in addition to the topical seminars that are to be given for credit in Pl P 515. The format and other requirements, such as an abstract that needs to be distributed prior to the exit seminar, are the same as those for Pl P 515.

A final oral examination is also required of all M.S. candidates. Refer to the Assessment section of this handbook for a copy of the rubric that will be used for all exams. The student must have completed or be enrolled in all the required course work, and registered for a minimum of 2 credit hours in Pl P 700 for the semester in which the final exam is to be taken.

A student, department chair, graduate program director, committee member, or any other member of the WSU community may request that the Graduate School provide an independent observer ("Graduate

Mentor") to be present at any final examination/ballot meeting. The name of the individual making the request will be held confidential.

Scheduling your Exam

Exam scheduling forms are due no less than 10 working days in advance of the selected exam date; send your completed and signed form to the Graduate Academic Coordinator for Department Chair approval, and upload to myWSU > Graduate School for processing.

IMPORTANT NOTE: By signing the *Dissertation/Thesis Acceptance/Final Examination Scheduling Form*, each Faculty Advisory Committee member agrees that a "typed (or electronic) dissertation, suitable in format and content for submission to the Library, has been given their approval." This means that each committee member has reviewed a complete version of the student's dissertation or thesis, and that it requires only minor revisions that could be made within the required ten-day period.

Students must also upload the draft of their thesis/dissertation to Proquest for format check no less than 10 working days prior to the selected exam date. At this time, also send an updated final draft to your committee members, AND email a pdf of your final draft to the Graduate Academic Coordinator to serve as the 'display' copy that is made available to the statewide faculty via secure Sharepoint. The abstract will also be extracted and shared with the exam announcement.

Balloting will be conducted via myWSU, coordinated by your advisor.

Within 10 working days of successful examination, the student is required to upload their final draft to Proquest and then upload a Thesis/Dissertation Approval Form to myWSU, as explained in the Service Request Guide, for electronic approval by the committee chair on behalf of the committee.

Additional departmental exit requirements will be shared by the Academic Coordinator when the exam is announced.

Final Defense via Videoconference (ZOOM)

ALL final exams will be held in Pullman or at one of the Research & Extension Centers. The student, major professor, and other committee members must be in attendance in Pullman or at an REC. Requests for exceptions must be directed to the department chair *in writing* by the advisor for the student. This must be done well in advance so as not to jeopardize the student meeting the requirement regarding submission of the Scheduling Form.

More Information

For more information on the Master's Degree, please go to Chapter 7 of the GSPP.

WASHINGTON STATE UNIVERSITY

DEADLINES FOR MASTERS DEGREES

Masters students must complete these actions by their associated deadlines to proceed through their degree program. If you have any questions, please contact the Graduate School at gradschool@wsu.edu.
**All forms are submitted to your graduate program's academic coordinator unless stated otherwise.

<table>
<tr><th>Degree Program Action</th><th>Deadline to Complete</th></tr>
<tr><td>Obtain an Advisor/Committee Chair
Refer to your graduate program's student handbook for more information.</td><td>As soon as possible after admission to the Graduate School.</td></tr>
<tr><td>Submit a Program of Study to the Graduate School
As a masters student you must submit the Program of Study form to your graduate program's academic coordinator at the beginning of the semester before you intend to take a final exam.

You may not take an exam in the same semester you submit your Program of Study. For example, if you plan to take a final exam in Fall 2024, your program form is due no later than 2/1/2024. Missing this deadline is grounds for the Graduate School to deny an examination request.

More Information is available here.</td><td>
<table>
<tr><th>Graduation Semester</th><th>Form Deadline</th></tr>
<tr><td>Fall 2023</td><td>2/1/2023</td></tr>
<tr><td>Spring 2024</td><td>9/1/2023</td></tr>
<tr><td>Summer 2024</td><td>2/1/2024</td></tr>
<tr><td>Fall 2024</td><td>2/1/2024</td></tr>
<tr><td>Spring 2025</td><td>9/1/2024</td></tr>
<tr><td>Summer 2025</td><td>2/1/2025</td></tr>
<tr><td>Fall 2025</td><td>2/1/2025</td></tr>
<tr><td>Spring 2026</td><td>9/1/2025</td></tr>
<tr><td>Summer 2026</td><td>2/1/2026</td></tr>
</table>
</td></tr>
<tr><td>Apply for Graduation
You must have an approved Program of Study on file with the Graduate School and have at least a 3.0 cumulative graduate GPA to apply for graduation.

You may apply for graduation within myWSU by selecting the Academic Advising tile and clicking on Apply to Graduate. All applicants pay a $60 processing fee which is valid for one calendar year.

Directions are available at https://gradschool.wsu.edu/graduation-application/

Updating Graduation Date
Students who have applied to graduate but are unable to complete their requirements may update their application for graduation. Send an email with your name, WSU ID number, and new graduation term to gradschool@wsu.edu. Students whose latest Application for Graduation fee is more than one calendar year old will be required to reapply for graduation within myWSU and pay this fee again.</td><td>
<table>
<tr><th>Semester of Graduation</th><th>Application Deadline</th></tr>
<tr><td>Fall 2023</td><td>10/6/2023</td></tr>
<tr><td>App available on</td><td>6/12/2023</td></tr>
<tr><td>+$50 late fee</td><td>10/7 – 10/31</td></tr>
<tr><td>+$75 late fee</td><td>11/1 – 11/17</td></tr>
<tr><td>Spring 2024</td><td>3/1/2024</td></tr>
<tr><td>App available on</td><td>10/9/2023</td></tr>
<tr><td>+$50 late fee</td><td>3/2 – 3/31</td></tr>
<tr><td>+$75 late fee</td><td>4/1 – 4/19</td></tr>
<tr><td>Summer 2024</td><td>5/31/2024</td></tr>
<tr><td>App available on</td><td>1/1/2024</td></tr>
<tr><td>+$50 late fee</td><td>6/1 – 6/30</td></tr>
<tr><td>+$75 late fee</td><td>7/1 – 7/26</td></tr>
<tr><td>Fall 2024</td><td>10/4/2024</td></tr>
<tr><td>App available on</td><td>6/10/2024</td></tr>
<tr><td>+$50 late fee</td><td>10/5 – 10/31</td></tr>
<tr><td>+$75 late fee</td><td>11/1 – 11/22</td></tr>
<tr><td>Spring 2025</td><td>3/7/2025</td></tr>
<tr><td>App available on</td><td>10/14/2024</td></tr>
<tr><td>+$50 late fee</td><td>3/8 – 3/31</td></tr>
<tr><td>+$75 late fee</td><td>4/1 – 4/18</td></tr>
<tr><td>Summer 2025</td><td>5/30/2025</td></tr>
<tr><td>App available on</td><td>1/1/2025</td></tr>
<tr><td>+$50 late fee</td><td>5/31 – 6/30</td></tr>
<tr><td>+$75 late fee</td><td>7/1 – 7/25</td></tr>
</table>
</td></tr>
</table>

Updated 7/31/2023

Schedule Final Exam

You must have applied for graduation to schedule a final exam.

Meet with your committee to identify a final exam date well in advance. Submit your exam form at least 10 business days prior to the proposed examination date. For those completing a master's thesis, you must also upload a complete draft of your thesis to ProQuest by this deadline at www.dissertations.wsu.edu.

Second attempt final exam scheduling forms and thesis drafts are due 15 working days prior to the proposed date of the exam.

More information is available here.

Semester	Form Deadline
Fall 2023	11/2/2023
Spring 2024	4/5/2024
Summer 2024	7/12/2024
Fall 2024	11/7/2024
Spring 2025	4/4/2025
Summer 2025	7/11/2025

Complete Final Exam

Students must take their final exam by these deadlines. Exceptions cannot be made to extend these dates. The exam must be Monday – Friday, between 8am and 5pm, excluding holidays.

See the above deadlines for scheduling your final exam.

More Information is available here.

Semester	Last Day for Final Exams
Fall 2023	11/17/2023
Spring 2024	4/19/2024
Summer 2024	7/26/2024
Fall 2024	11/22/2024
Spring 2025	4/18/2025
Summer 2025	7/25/2025

Final Document Submission

If you are completing a master's thesis for your degree, you must update your ProQuest submission with your final thesis (including revisions from your committee and the Graduate School). Also, you must upload your completed *Hold Harmless* form and your *Thesis/Dissertation Approval* form into myWSU. Your committee chair must approve your *Thesis/Dissertation Approval* form within myWSU. Your academic coordinator will electronically deliver the approved form to the Graduate School.

All final documents (final thesis, the *Hold Harmless* form, and the *Thesis/Dissertation Approval* form along with myWSU approval by your committee chair) are due 10 business days after your final exam.

Example Final Exam Date	Example Deadline
4/4/2024	4/18/2024

Commencement Participation

Masters students wishing to participate in commencement must have applied for graduation. You must also register for the ceremony at the Graduation Fair or at https://commencement.wsu.edu.

For more information, please see https://commencement.wsu.edu.

Updated 7/31/2023

DOCTORAL DEGREE IN PLANT PATHOLOGY

The period of study for the Ph.D. should be at least 3 years regardless of the degree status of the student before they begin their program. At least one semester shall be in residence at WSU on the Pullman campus.

Major Professor

Each student in the Department of Plant Pathology is chosen by a professor and agrees to be that professor's student. The professor is known as the student's major professor and also functions as his/her academic advisor. The major professor is the chair of the student's advisory committee and supervises the thesis research (see Faculty listing in the back of this handbook).

Doctoral Advisory Committee

During the first semester, an advisory committee should be chosen. The student, the major professor and the committee plan the student's program of study. The doctoral committee must include a minimum four (4) committee members per Plant Pathology program bylaws, three (3) of which must be WSU faculty members, including the Major Advisor as Chair. The majority of committee members must be Graduate Faculty in Plant Pathology. At least two members must be tenured or tenure-track Plant Pathology Graduate Faculty; USDA-ARS researchers appointed as WSU adjunct Plant Pathology faculty are entitled to act as Chair, Co-Chair, or member of graduate student committees. At least one member must be located on the Pullman campus; ***for students whose major advisor is located off the Pullman campus, the Pullman designated committee member will serve as campus advisor while the student is Pullman*** and provide lab space in which to work, if needed. Other individuals internal to WSU serving as Graduate Faculty in their own program or discipline may serve as a committee member with approval of the Plant Pathology Chair. External committee members are approved on a case-by-case basis.

At least one faculty member of the committee must be from the minor department/program if a minor is declared on the doctoral program. When no minor is declared, no outside member is required. However, when outside supporting course work is included in the Program of Study, an outside member is recommended.

Doctoral Program of Study

The Ph.D. program form should be submitted no later than the end of the first year of Ph.D. studies. ***Please be sure to submit a copy of the completed program of study form (including all signatures) to the Graduate Academic Coordinator who will file it electronically with the Graduate School via myWSU.*** The program for the Ph.D. in Plant Pathology must include:

- **72** credit hours minimum of total credit
  - **34** credit hours minimum of graded course work, 25 of which must be at the 500 level with a maximum of 9 credit hours of non-graduate credit (300 or 400 level). Only ½ of the graded coursework is transferrable from another university (approximately 17-18 credits of the 34 semester hours).

14 credit hours minimum of Plant Pathology coursework are required which may also include transfer credits if they are accepted by the Graduate School.

2 credit hours minimum of Seminar (PlP 515) must be taken in the PhD program, and 20 credit hours minimum of PlP 800 research credit hours

Copies of the forms and directions can be found on the Graduate School's 'forms' page. When completing the form, please note:

- If a definite dissertation title has not been decided upon, the general subject area should be reported.
- Please obtain appropriate departmental and committee members' signatures.
- The student should supply appropriate information regarding courses taken and proposed, utilizing this handbook, the WSU catalog, WSU academic records, and official transcripts from other institutions. Transfer credit, if requested, should be reported exactly as it appears on the original transcript. Transfer credit hours should be reported in semester hours. All credits should be listed by year.

Degree Deadlines

Doctoral students have two deadlines: 1) the oldest coursework on the Program of Study cannot be over 10 years old at time of graduation; and 2) the degree must be earned within four years of successfully passing the Preliminary Exam.

Dissertation Research Proposal

Effective for students beginning their studies in spring semester of 2018 and thereafter, all Ph.D. students will be required to submit a Dissertation Research Proposal to his/her Doctoral Committee. Effective fall semester 2020 and thereafter, Ph.D. students are required to undergo a dissertation research proposal defense of their proposal in front of their Doctoral Committee. The proposal presentation is open to all faculty members.

Each student should initiate their dissertation research proposal at the start of the second semester of their Ph.D. program. The proposal defense should be scheduled and presented to the student's Doctoral Committee by the end of the third semester. The proposal must be emailed to all committee members in Word or PDF format (based on committee member' preference for review) at least 10 business days prior to the proposal defense date. The final, completed proposal must be approved by the committee by the end of the fourth semester. If the proposal defense to the Doctoral Committee is not completed by the end of the fourth semester, the student will receive an 'Unsatisfactory' on her/his PlP 800 credits, and an unsatisfactory grade will be received in subsequent semesters until the proposal is completed. NOTE: Students are not permitted to receive an 'Unsatisfactory' grade for more than two semesters.

Students are welcome and encouraged to communicate with committee members on objectives and methods while writing the proposal. The student's Doctoral Committee chair and members are expected to provide feedback on the proposal writing as they deem appropriate based on each student's individual experience and technical writing skills. After the dissertation defense, the committee members may

suggest revisions to the proposal, which must then be incorporated by the student and the revised proposal sent back to the committee for review. The proposal is not completed until it is deemed acceptable to the student's Doctoral committee members. Each committee member must complete the Dissertation Research Proposal Defense Evaluation Form with a written response to the student about the proposal, and must confirm in writing their acceptance of the final version of the proposal. More details of the format are given in the Appendix section of this handbook.

Preliminary Examination

An oral preliminary examination is required for each Ph.D. student during his/her program. The purpose of the preliminary examination is to test the student's knowledge of plant pathology and related areas. The preliminary examination is typically scheduled after the student has completed most of his/her required course work, usually at the end of the second year of his/her program, but no later than 4 months prior to the oral dissertation defense. Refer to the Assessment section of this handbook for a copy of the rubric that will be used for all preliminary exams. The student must have an approved program of study on file, and permission from their committee members to schedule the exam. ***The preliminary exam must be scheduled a minimum of 10 working days in advance of the exam date. Please provide a completed copy of the scheduling form with committee signatures to the Graduate Academic Coordinator. They will get Department Chair approval and then submit the form to the Graduate School via myWSU for processing.*** Check deadlines!

The student's dissertation advisory committee will give the examination. A student, department chair, graduate program director, committee member, or any other member of the WSU community may request that the Graduate School provide an independent observer ("Graduate Mentor") to be present at any final examination/ballot meeting. The name of the individual making the request will be held confidential. There are three possible outcomes of the preliminary examination: 1) the committee votes to pass the student based on satisfactory performance; 2) the committee votes to fail the student based on unsatisfactory performance but recommends the student be allowed to take the examination again after a minimum period of three months, with a Graduate Mentor present; 3) the committee votes to fail the student based on unsatisfactory performance and recommends the student be terminated from the graduate program. The committee may also make recommendations to correct deficiencies that become evident during the preliminary examination. To inform yourself as to the committee's expectations for a successful defense, see the Final Defense Rubric in the Assessment section of this handbook. Talk to your advisor and committee members for any clarification you need.

NOTE: Preparation for the preliminary examination, i.e., studying, is to be done on the student's own time.

Doctoral Dissertation

A dissertation based on original research is required for the Ph.D. in plant pathology. The dissertation is a scholarly study that represents a significant publishable contribution to the science of Plant Pathology.

Thesis and dissertation formatting and submission requirements, in addition to a Word template, are available on the Graduate School website.

The Plant Pathology program requires a draft of the dissertation that has been read and approved by the major advisor must be given to all committee members ****at least one (1) month prior to the date of your defense***. Refer to the Graduate School's 'Deadlines and Procedures for Graduation' for relevant deadlines. Committee members must read, edit, and return drafts of the dissertation to the student within a reasonable period of time. The Graduate Studies Committee recommends that committee members hold drafts for no longer than 30 days.

> ****Students: Be aware that your committee may require more time to review/comment on your dissertation. Communicate with your advisor and committee early in the thesis writing process to establish the specific timelines for your dissertation. It is strongly advised that the student call a committee meeting one (1) semester prior to their anticipated defense date to discuss the timeline for the actual defense date, committee members' availability, etc.*

To inform yourself as to the committee's expectations for a successful defense, see the Final Defense Rubric in the Assessment section of this handbook. Talk to your advisor and committee members for any clarification you need.

It is also strongly advised that *the Application for Degree* be submitted at least one semester prior to the final examination is scheduled so the student can be notified of graduate requirements (to-do lists) before enrolling their last semester.

Doctoral Dissertation Defense

All students are required to give a **Final Defense Seminar.** The date and time are to be decided after consultation with the student's advisor, but optimal timing is generally a day or two before the defense. Sometimes these seminars fit into the regular Monday 4:10 pm timeslot but are often at other times on other days. The non-credit exit seminar will be part of the requirements for graduation and is in addition to the topical seminars that are to be given for credit in Pl P 515. The format and other requirements, such as an abstract that needs to be distributed prior to the exit seminar, are the same as those for Pl P 515.

A final oral defense exam is also required of all Ph.D. candidates. The student must have completed or be enrolled in all the required course work and registered for a minimum of 2 credit hours in Pl P 800 for the semester in which the final exam is to be taken. To schedule your final examination, you must have an approved *Application for the Degree* on file with the Graduate School. It is strongly advised that the *Application for Degree* be completed and submitted at least one semester prior to the final examination is scheduled so the student can be notified of graduate requirements (to-do lists) before enrolling their last semester. Refer to the Assessment section of this handbook for a copy of the rubric that will be used for all exams

A student, department chair, graduate program director, committee member, or any other member of the WSU community may request that the Graduate School provide an independent observer ("Graduate Mentor") to be present at any final examination/ballot meeting. The name of the individual making the request will be held confidential.

It is also strongly advised that the student call a committee meeting one (1) semester prior to their anticipated defense date to discuss the timeline for the actual defense date, committee members' availability, etc. Communication between a student and their committee members is critical and must go in both directions.

Scheduling your Exam

Exam scheduling forms are due no less than 10 working days in advance of the selected exam date; send your completed and signed form to the Graduate Academic Coordinator for Department Chair approval, and upload to myWSU > Graduate School for processing.

IMPORTANT NOTE: By signing the *Dissertation/Thesis Acceptance/Final Examination Scheduling Form* each Faculty Advisory Committee member agrees that a "typed (or electronic) dissertation, suitable in format and content for submission to the Library, has been given their approval." This means that each committee member has reviewed a complete version of the student's dissertation or thesis, and that it requires only minor revisions that could be made within a 10-day period.

Students must also upload the draft of their thesis/dissertation to Proquest for format check no less than 10 working days prior to the selected exam date. At this time, also send an updated final draft to your committee members, AND email a pdf of your final draft to the Graduate Academic Coordinator to serve as the 'display' copy that is made available to the statewide faculty via secure Sharepoint. The abstract will also be extracted and shared with the exam announcement.

Balloting will be conducted via myWSU, coordinated by the student's advisor.

Within 10 working days of successful examination, the student is required to upload their final draft to Proquest and then upload a Thesis/Dissertation Approval Form to myWSU, as explained in the Service Request Guide, for electronic approval by the committee chair on behalf of the committee.

Additional departmental exit requirements will be shared by the Academic Coordinator when the exam is announced.

Final Defense via Videoconference (ZOOM)

ALL final exams will be held in Pullman or at one of the Research & Extension Centers. The student, major professor, and other committee members must be in attendance in Pullman or at one of the RECs. Requests for exceptions must be directed to the department chair in writing by the advisor for the student. This must be done well in advance so as not to jeopardize the student meeting the requirement regarding submission of the Scheduling Form.

More Information

For more information on the Ph.D. degree, please go to Chapter 8 in the Policies and Procedures.

Deadlines and Procedures for PhD Graduate Degrees

WASHINGTON STATE UNIVERSITY

DEADLINES FOR DOCTORAL DEGREES

Doctoral students must complete these actions by their associated deadlines to proceed through their degree program. If you have any questions, please contact the Graduate School at gradschool@wsu.edu.
**All forms are submitted to your graduate program's academic coordinator unless stated otherwise.

<table>
<tr><th>Degree Program Action</th><th>Deadline to Complete</th></tr>
<tr><td>Obtain an Advisor/Committee Chair
Refer to your graduate program's student handbook for more information.</td><td>As soon as possible after admission to the Graduate School.</td></tr>
<tr><td>Submit a Program of Study to the Graduate School
Doctoral students must submit the Program of Study form to their graduate program's academic coordinator during their third semester.

A graduate student cannot take an exam in the same semester they submit their Program of Study. If you plan to take a prelim exam in Fall 2022, your program form is due by the Spring 2022 deadline. Missing this deadline is grounds for the Graduate School to deny an examination request.

More information is available here.</td><td><table><tr><th>Third Semester</th><th>Form Deadline</th></tr><tr><td>Fall 2023</td><td>10/1/2023</td></tr><tr><td>Spring 2024</td><td>3/1/2024</td></tr><tr><td>Summer 2024</td><td>3/1/2024</td></tr><tr><td>Fall 2024</td><td>10/1/2024</td></tr><tr><td>Spring 2025</td><td>3/1/2025</td></tr><tr><td>Summer 2025</td><td>3/1/2025</td></tr><tr><td>Fall 2025</td><td>10/1/2025</td></tr><tr><td>Spring 2026</td><td>3/1/2026</td></tr><tr><td>Summer 2026</td><td>3/1/2026</td></tr></table></td></tr>
<tr><td>Schedule Preliminary Exam
You must have an approved Program of Study on file with the Graduate School to schedule your preliminary exam (see above).

Submit your exam form at least 10 working days prior to the proposed exam date. You must have no more than 6 graded credits of outstanding and/or in-progress coursework remaining on your Program of Study to schedule your preliminary exam.

Second attempt preliminary exam scheduling forms are due 15 working days prior to the proposed date of the exam.

More information is available here.</td><td><table><tr><th>Semester</th><th>Form Deadline</th></tr><tr><td>Fall 2023</td><td>11/22/2023</td></tr><tr><td>Spring 2024</td><td>4/12/024</td></tr><tr><td>Summer 2024</td><td>7/12/2024</td></tr><tr><td>Fall 2024</td><td>11/20/2024</td></tr><tr><td>Spring 2025</td><td>4/11/2025</td></tr><tr><td>Summer 2025</td><td>7/11/2025</td></tr></table></td></tr>
<tr><td>Complete Preliminary Exam
Students may take their preliminary exams at any point during the semester, Monday – Friday, between 8am and 5pm, excluding holidays. Preliminary exams may not be held during finals week.

See the above deadlines for scheduling your preliminary exam.

More Information is available here.</td><td><table><tr><th>Semester</th><th>Last Day for Prelim Exams</th></tr><tr><td>Fall 2023</td><td>12/8/2023</td></tr><tr><td>Spring 2024</td><td>4/26/2024</td></tr><tr><td>Summer 2024</td><td>7/26/2024</td></tr><tr><td>Fall 2024</td><td>12/6/2024</td></tr><tr><td>Spring 2025</td><td>4/25/2025</td></tr><tr><td>Summer 2025</td><td>7/25/2025</td></tr></table></td></tr>
</table>

Updated 7/31/2023

Apply for Graduation

You must have an approved Program of Study on file with the Graduate School, have passed your preliminary exam, and have at least a 3.0 cumulative graduate GPA to apply for graduation.

You may apply for graduation within myWSU by selecting the Academic Advising tile and clicking on Apply to Graduate. All applicants pay a $60 processing fee which is valid for one calendar year.

Directions are available at https://gradschool.wsu.edu/graduation-application/

Apply for Graduation (continued from above)

See above for details regarding the application for graduation.

Updating Graduation Date

Students who have applied to graduate but are unable to complete their requirements may update their application for graduation. Send an email with your name, WSU ID number, and new graduation term to gradschool@wsu.edu. Students whose latest Application for Graduation fee is more than one calendar year old will be required to reapply for graduation within myWSU and pay this fee again.

Semester of Graduation	Application Deadline
Fall 2023	**10/6/2023**
App available on	6/12/2023
+$50 late fee	10/7 – 10/31
+$75 late fee	11/1 – 11/17
Spring 2024	**3/1/2024**
App available on	10/9/2023
+$50 late fee	3/2 – 3/31
+$75 late fee	4/1 – 4/19
Summer 2024	**5/31/2024**
App available on	1/1/2024
+$50 late fee	6/1 – 6/30
+$75 late fee	7/1 – 7/26
Fall 2024	**10/4/2024**
App available on	6/10/2024
+$50 late fee	10/5 – 10/31
+$75 late fee	11/1 – 11/22
Spring 2025	**3/7/2025**
App available on	10/14/2024
+$50 late fee	3/8 – 3/31
+$75 late fee	4/1 – 4/18
Summer 2025	**5/30/2025**
App available on	1/1/2025
+$50 late fee	5/31 – 6/30
+$75 late fee	7/1 – 7/25

Schedule Final Exam

You must have applied for graduation to schedule a final exam.

Meet with your committee to identify a final exam date well in advance. Submit your exam form (and upload a complete draft of your dissertation to ProQuest at www.dissertations.wsu.edu) at least 10 working days prior to the proposed examination date.

Second attempt final exam scheduling forms and drafts are due 15 working days prior to the proposed date of the exam.

More information is available here.

Semester	Form Deadline
Fall 2023	11/2/2023
Spring 2024	4/5/2024
Summer 2024	7/12/2024
Fall 2024	11/7/2024
Spring 2025	4/4/2025
Summer 2025	7/11/2025

Complete Final Exam

Students must take their final exam by these deadlines. Exceptions cannot be made to extend these dates. The exam must be Monday – Friday, between 8am and 5pm, excluding holidays.

See the above deadlines for scheduling your final exam.

More Information is available here.

Semester	Last Day for Final Exams
Fall 2023	11/17/2023
Spring 2024	4/19/2024
Summer 2024	7/26/2024
Fall 2024	11/22/2024
Spring 2025	4/18/2025
Summer 2025	7/25/2025

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<table>
<tr>
<td>Final Document Submission
You must update your ProQuest submission with your final dissertation (including revisions from your committee and the Graduate School). Also, you must upload your completed Hold Harmless form and your Thesis/Dissertation Approval form into myWSU. Your committee chair must approve your Thesis/Dissertation Approval form within myWSU. Your academic coordinator will electronically deliver the approved form to the Graduate School.

Students graduating from a PhD program must also complete the Survey of Earned Doctorates (SED) using the link found at www.gradschool.wsu.edu/forms. You must upload your SED completion certificate into myWSU.</td>
<td>All final documents (final thesis, the Hold Harmless form, SED completion certificate, and the Thesis/Dissertation Approval form along with myWSU approval by your committee chair) are due 10 business days after your final exam.

<table><tr><th>Example Final Exam Date</th><th>Example Deadline</th></tr><tr><td>4/4/2024</td><td>4/18/2024</td></tr></table></td>
</tr>
<tr>
<td>Commencement Participation
Doctoral students wishing to participate in commencement must have applied for graduation. You (and the faculty member hooding you) must also register for the ceremony at the Graduation Fair or at https://commencement.wsu.edu.</td>
<td>For more information, please see https://commencement.wsu.edu.</td>
</tr>
</table>

Updated 7/31/2023

ASSISTANTSHIPS

Appointments

Within the Department of Plant Pathology there is a limited number of Research Assistantships (RA) available for students. There are two levels of compensation: one for M.S. students (Step 42) and one for Ph.D. students (Step 47). All students on appointment are paid on a 12-month basis. Summer salary is the same as the salary for spring semester. Increases in pay from one level to the next occur only at the beginning of fall or spring semester. Benefits for TA/RA appointments currently include medical and dental insurance.

Appointments are at 0.50 FTE (full-time equivalent). The required academic load is 10 credit hours (10-12 average enrollment) during fall and spring semester, and if necessary, three for the summer. The required workload is 20 hours per week. For the RA, the work required is at the discretion of the major professor. Assistantships are granted on a semester basis and are renewed each semester at the discretion of the Graduate School and the Department. All study, whether for classes, exams or defense, is to be done on the student's own time.

The acceptance of admission, whether paid for from teaching funds, research grants, experiment station monies, or from public, private or foreign sources, implies a commitment on the part of the graduate student to conduct research with the major professor under a specific project. Except under extraordinary circumstances, students are discouraged from changing research projects. Doing so not only is disruptive of ongoing research, but also requires reassignment and finding other sources of financial support, both of which may be difficult, or even impossible.

Funding Source

Not all assistants are funded from the same sources. Whether or not tuition can be paid depends on the stipulations regulated by the granting agency. If tuition is not allowed, the assistant will be paid a higher salary to compensate and will be expected to pay tuition him/herself. This may or may not result in a slightly higher tax responsibility. All tax responsibility rests with the student.

Reappointment

Reappointments normally will be approved if recommended by the department provided the student has maintained a 3.0 cumulative grade point average (GPA) or higher in all work since initial admission to the Graduate School, provided there are no outstanding incomplete grades of more than one semester or summer session duration, and provided the student has demonstrated satisfactory research progress and continued regular enrollment in the Graduate School.

Vacation/Leave Policy

There are no scheduled or guaranteed vacations. Students on appointment do not earn leave time. *During the term of their appointments, all graduate student assistants are expected to be at work each normal workday, including periods when the University is not in session, with the exception of the legal holidays designated by the Board of Regents.* The major professor must approve all absences in advance**.**

Continuous enrollment and graduate leave policies are provided in the Graduate School Policies and Procedures Manual, Chapter 5.

Residency Requirement

Graduate students on RA/TA/PA appointments must live in the State of Washington.

Non-resident U.S. citizens with assistantships are guaranteed a non-resident tuition waiver for one year only. Upon your arrival, please begin taking the necessary steps to become a Washington State resident.

Information on establishing Washington residency can be found on the Graduate School website here.

Additional Resources

In addition to the graduate advisor, committee members and other students, grant writing support is available through:

- The WSU Graduate and Professional Writing Center (Smith CUE 414, gpwc@wsu.edu
- Crops/Soils 511: Science Writing Workshop. (2 credits, offered spring semester).

GRADUATE AND PROFESSIONAL STUDENT ASSOCIATION

The Graduate and Professional Student Association (GPSA) is the representative body for graduate and professional students at WSU. The GPSA's primary role is to provide academic and professional support services. Through active participation and membership in numerous national, state, and university organizations and committees, the GPSA seeks to provide graduate and professional students with representation and a forum to express their concerns. All graduate and professional students are encouraged to direct their concerns and questions to their respective Senators, District Representatives, or to the President and Vice President.

The GPSA sponsors several activities for the benefit of graduate students. Please see Services at their website for complete details.

There is at least one GPSA Senator from each department on campus that has a graduate program. The number of senators is based on the number of graduate students in the department. Currently, the Department of Plant Pathology can have 2 Senators, selected by the students.

GPSA Research Exposition

The GPSA Research Exposition held each Spring provides an opportunity for graduate and professional students to present and publish their research. Cash prizes are awarded in each of five academic divisions. To find out when to register and further information regarding abstract submission, please visit the website.

GPSA Excellence Awards

The Graduate and Professional Student Association conducts the GPSA Excellence Awards each year. The GPSA Excellence awards are broken up into six different categories; Graduate Assistant, Teaching Assistant, Research Assistant, Graduate Student Instructor, Academic Advisor, and Registered Student Organization. Nominations are accepted from students, peers, and advisors in the fall and spring, with winners recognized during the spring awards banquet.

Travel/Registration Grants

Travel and registration grants are available to help defray transportation and registration costs for presentation of papers at significant professional meetings.

Travel grants may also be available through various professional organizations including The American Phytopathological Society (APS), Mycological Society of America, and the Society of Nematologists. These must be applied for well in advance. Consult with your advisor for approval to travel and present your work at potential meetings.

Copy Services

Graduate students can make copies for 5 cents/copy in the GPSA Study Center which is located in the Holland Terrill Library. To pay for printing and copying you must have money on your Cougar Card, the same card you use to check out books. To put money on your Cougar Card online, just go to the Cougar Card website, click on Add Cougar Cash, and follow the instructions. If you need to put cash on your Cougar Card, or have problems with your card, go to the Cougar Card office, CUB Room 60.

FACULTY

DEPARTMENT OF PLANT PATHOLOGY
* Indicates Adjunct Faculty

NAME & TITLE	EXPERTISE	LOCATION, PHONE, & E –MAIL
Achour Amiri, Ph.D. Assistant Professor.	Postharvest disease in tree fruit	TFREC - Wenatchee 509-663-8181 a.amiri@wsu.edu
Gary A. Chastagner, Ph. D. Plant Pathologist and Extension Specialist	Christmas trees, turf, bulb, and ornamental diseases	WWREC - Puyallup 253-445-4528 chastag@wsu.edu
*Weidong Chen, Ph.D. Research Plant Pathologist USDA-ARS	Fungal diseases of grain legumes, genetics of host-pathogen interactions.	WSU - Pullman 509-335-9178 w-chen@wsu.edu
*Xianming Chen, Ph.D. Research Plant Pathologist USDA-ARS	Cereal rusts, genetics and plant resistance	WSU - Pullman 509-335-8086 xianming@wsu.edu
Lindsey du Toit, Ph.D. Professor and Extension Plant Pathologist	Vegetable seed pathology, vegetable pathology	NWREC Mt.Vernon 360-848-6140 dutoit@wsu.edu
Maren L. Friesen, Ph.D. Assistant Professor	Biological nitrogen-fixation, evolutionary ecology, population Genomics, mathematical modeling	WSU – Pullman 509-335-5805 m.friesen@wsu.edu
Cynthia Gleason, Ph.D. Assistant Professor	Molecular basis of plant-nematode interactions	WSU - Pullman 509-335-3742 cynthia.gleason@wsu.edu
Gary G. Grove, Ph.D. Professor	Fruit tree diseases and epidemiology	IAREC - Prosser 509-786-9283 grove@wsu.edu
*Christina Hagerty, Ph.D. Extension Educator	Cereal pathology	OSU Extension 541-278-4186 christina.hagerty@oregonstate.edu
Scott Harper, Ph.D. Assistant Professor Director, Clean Plant Center Northwest	Viruses of perennial crops, virus-virus and virus-host interactions, viral diagnostics and disease management	IAREC – Prosser 509-786-9230 scott.harper@wsu.edu

*Ned Klopfenstein, Ph.D. Research Plant Pathologist USDA-Forest Service	Forest pathogens	Rocky Mtn. Res. Stn. Moscow, Idaho 208-883-2310 nklopfenstein@fs.fed.us
Chakradhar Mattupalli, Ph.D. Assistant Professor	Berry and potato pathology	NWREC Mt.Vernon 360-848-6138 c.mattupalli@wsu.edu
*Michelle Moyer, Ph.D. Affiliate Associate Professor	Viticulture, grapevine stress response, IPM, Extension	IAREC – Prosser 509-786-9324 michelle.moyer@wsu.edu
Timothy D. Murray, Ph.D. Professor and Chair Extension Plant Pathologist	Cereal diseases, ecology and epidemiology of soilborne pathogens, disease resistance and chemical control	WSU - Pullman 509-335-7515 tim.murray@wsu.edu
Hanu Pappu, Ph.D. Professor Plant Pathologist	Plant virology Virus-host interactions Vegetables & Ornamentals	WSU - Pullman 509-335-3752 hrp@wsu.edu
*Timothy C. Paulitz, Ph.D. Research Plant Pathologist USDA-ARS	Mycology and soilborne plant pathology	WSU - Pullman 509-335-7077 paulitz@wsu.edu
Naidu Rayapati, Ph.D. Professor	Plant virology; virus-vector interactions, virus diseases of grapes	IAREC – Prosser 509-786-9215 naidu@wsu.edu
*Deven See, Ph.D. Research Geneticist USDA-ARS Director, Western Regional Small Grains Genotyping Lab.	Molecular genetics of wheat, positional cloning, manipulating and characterizing puroindoline genes, genome evolution	WSU - Pullman 509-335-5740 deven.see@ars.usda.gov
Kiwamu Tanaka, Ph.D. Associate Professor Plant Pathologist	Molecular plant-microbe interactions and plant innate immunity	WSU - Pullman 509-335-6418 kiwamu.tanaka@wsu.edu
*Linda S. Thomashow, Ph.D. Research Plant Pathologist USDA-ARS	Cereal root diseases, molecular plant-microbe	WSU - Pullman 509-335-0930 thomashow@wsu.edu
Jana U'Ren Assistant Professor	Mycology	WSU-Pullman 509-335- jana.uren@wsu.edu

*George Vandemark Plant Research Geneticist USDA-ARS	Legume germplasm and basic & applied investigations of problems associated with legume improvement	WSU Pullman 509-335-9521 george.vandemark@ars.usda.gov
*David M. Weller, Ph.D. Research Plant Pathologist USDA-ARS	Interactions, and biocontrol cereal diseases, bacteriology, biocontrol, and molecular ecology	WSU - Pullman 509-335-6210 wellerd@wsu.edu
Youfu (Frank) Zhao, Ph.D. Professor	Bacterial diseases of tree fruits	IAREC – Prosser 509-786-9284 youfu.zhao@wsu.edu
Svetlana Yurgel, Ph.D. Research Scientist USDA-ARS	Soil and plant microbiomes in legume rotations	IAREC – Prosser 509-786- svetlana.yurgel@usda.gov

APPENDIX

Dissertation Research Proposal Guidelines

Request for Proposals for Student Dissertation Proposals

These guidelines are intended to be an aid for each Ph.D. graduate student to develop their Dissertation Research Proposal. Refer to details in the Dissertation Research Proposal section of this handbook for the timeline for a PhD student to prepare and present the Dissertation Research Proposal to their committee members, for committee members to provide feedback to the student using the Dissertation Research Proposal Defense Form, and for the student to incorporate requested changes/edits into the proposal. Any additional details for a student's research proposal should be discussed with their Doctoral Committee.

Purpose

The purpose of the proposal is two-fold:

1. It will help the student plan her/his research and timeline, and ensure that the plan is acceptable to the student's dissertation committee, and
2. It will provide experience in grant writing.

In addition, the proposal could serve as a draft of a grant proposal to a funding agency. Many dissertation projects evolve as discoveries and obstacles are encountered, so the proposal is not meant to be a contract for work that will be performed.

The full dissertation proposal should present:

- The long-term goals, objectives, and scientific significance of the proposed work;
- The rationale for the research and benefits to society;
- The methods to be employed;
- The merits of the proposed project stated clearly.

Proposal Page Formatting

- Number of pages: 8 – 15, not including Cover Sheet, References cited, and Facilities (F and G below).
- Visual materials, including charts, graphs, maps, photographs and other pictorial presentations are encouraged and should be **included** in the 15-page limit.
- Font: Cambria, Courier New, Times New Roman or similar fonts: 11 points or larger.
- 10-point fonts are acceptable for figure captions, mathematical formulae and equations, tables and diagram captions.
- Tables and figures can be embedded in text or listed at the end of the proposal at the discretion of the student's advisor.
- No more than six lines of text within a vertical space of one inch.
- Margins in all directions must be at least an inch.
- Single column format.
- The proposal major sections and sub-sections should be delineated with headings and sub-headings.

Proposal Elements and Organization

A. Cover Sheet

1) Student name
2) Committee members

B. Project Summary (Maximum 300 words, written in the third person, understandable by technically literate non-scientists)

1) Overview - need for research.
2) Description of methods and expected results, including experimental resources, design, and data analysis.
3) Statement of intellectual merit - potential of the proposed research to advance knowledge.
4) Statement of the broader impacts of the proposed activity - potential of the proposed research to benefit society.

C. Project Description

1) Introduction. The research problem and major objectives of the proposed project should be stated. The need for research should be supported with a thorough description of the present state of knowledge in the field, work in progress in the laboratory in which the student is working, and work in progress elsewhere.

2) Specific Objectives. Include a bullet list or outline of major and specific objectives.

3) Preliminary work, described for each objective:
    a. Ongoing or recently completed activities and pilot studies significant to the project. Concentrate on reporting results in this section.
    b. If the same experiments are to be repeated in the proposed work, it is ok to describe those details in the experimental plan section and refer the reader to those descriptions.

4) Experimental plan for each objective. For each objective, the experimental plan should include:
        i. Re-statement of the objective
        ii. A hypothesis for the proposed experiments within that objective. The hypothesis must be testable, falsifiable, parsimonious, precise, useful, and relevant.
        iii. A rationale for this hypothesis.
        iv. Experimental methods to be used. The project activities may be based on previously established and/or innovative methods and approaches, and must be well justified.
        v. For each objective, address:
            - Address what will be done
            - Why this method was chosen
            - How the experiment will be conducted
            - Feasibility of achieving results with this method/experiment
            - How the data will be collected and stored
            - How the data will be analyzed and interpreted including statistical methods

- Expected results by objective
- Potential limitations and problems. Include alternative methods to complete the objective.

D. The broader impacts of the proposed research. What are the benefits that will accrue if the project is successful?

E. Timeline for achieving research goals. Include in this timeline the milestones for completing course requirements and the preliminary exam.

F. References cited. Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the website address also should be identified and verified. The use of bibliographic software is encouraged. Please double check to make sure that this software has accurately formatted references in the same style for all references cited.

G. Facilities, equipment, and other resources. This section of the proposal is used to assess the adequacy of the resources available to perform the effort proposed. List applicable equipment, laboratory space, greenhouse and field space available to compete the work proposed.

Dissertation Research Proposal Defense Evaluation Form

Please use the Word document version located on the Plant Pathology website, linked here.

Dissertation Research Proposal Defense Evaluation Form
WSU Department of Plant Pathology
(Revised December 21, 2023)

Committee member name: _____

Student's name: _____

PhD proposal title: _____

Date of PhD proposal defense presentation to committee members: _____

Committee Member Recommendation (check one option below)

- ☐ **Accepted. No Revisions Needed**
- ☐ **Accepted, Pending Minor Revisions (see below)**
- ☐ **Not Accepted. Major revisions needed (see below)**

Committee Member's Suggestions for Revisions (Your specific requirements for revisions should be written below or provided to the student as a separate file):

Major revisions:

Minor revisions:

Due Date for Revisions (check one of the options below or specify a date)

- ☐ 2 weeks from today's date
- ☐ 3 weeks from today's date
- ☐ 4 weeks from today's date
- ☐ Other; please specify due date: _____

This following section is to be completed by each committee member within 2 weeks of receiving the revised proposal from the student, if revisions are adequate. The proposal must be approved by the student's advisor AND a majority of non-advisor committee members (e.g., 2 of 3). If the revised proposal is not acceptable, the student will have 1 month to prepare a second revision. Committee members will review and respond within 2 weeks of receiving the second revision.

By signing below, I agree that I have read the student's revised proposal and it is now accepted.

Committee member signature _____ Date _____