

# GRADUATE STUDENT HANDBOOK 2023-2024

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#### **TABLE OF CONTENTS**

Message From Chair	. 3
Diversity Statement	. 3
Graduate Program Mission	3
GENERAL INFORMATION AND RESOURCES	
Paydays	5
Time Off Policies	5
Tuition and Fees	5
UW Graduate Student Health Insurance	5
UW Husky Card	6
UW Transportation	
UW Campus Resource	6
Department Resources	7
Residency Status Change	
•	
GRADUATE PROGRAM REQUIREMENTS	
UW Graduate School Requirements	9
UW Graduate School Policies and Student Conduct Code	
UW Pharmacology Graduate Program Admission Requirements	11
UW Pharmacology Graduate Program Requirements	
First Year	
Course Information	12
First Year Student Advising and Evaluation	
Laboratory Rotations	
Selection of Dissertation Advisor	
Biomedical Research Integrity	
	13
Second Year	
Courses Information	
Teaching Requirement	
Choosing Your Doctoral Supervisory Committee	
Individual Development Plan (IDP)	
Preliminary Review	
Written Component of General Examination	17
Third Year	
Course Information	18
Oral Component of General Examination	19
Steps to Your Oral General Examination	20
Fourth and Subsequent Years	
Course Information	21
Annual Review of Dissertation Progress	
Final Examination	
Program Requirements Grid	23



Pharmacology utilizes cellular and molecular biology, biochemistry, structural biology, biophysics, genetics, physiology, and neurobiology as tools to design and discover new therapeutics and to better understand what happens when the human body is in a disease state. The technical and problem-solving skills developed in our graduate program has prepared students for diverse and fulfilling careers in science and medicine that encompass academia, industry, scientific communications, public health, and beyond.

#### **MESSAGE FROM CHAIR**

Our mission is to explore the action of drugs and their role in the treatment of disease. Consequently, faculty research interests encompass drug discovery, biophysics, biochemistry, structural biology, cell biology, neurobiology, and pharmacogenetics. My role as Chair is to enable innovative research by UW Pharmacology scientists, and encourage the translation of these ideas from the lab to the clinic.

#### **DIVERSITY STATEMENT**

We value diverse experiences and perspectives. We strive to create a welcoming and respectful learning environment that promotes access, opportunity, and justice for all. We are firmly committed to supporting activities that enhance diversity, equity, and inclusion.

UW Pharmacology is working towards four goals outlined in the <u>University of Washington Diversity</u> Blueprint 2022-2026

- Cultivate and communicate our commitment to diversity
- Attract, retain and advance an excellent and diverse workforce
- Foster and sustain a welcoming climate for diversity and outreach
- Improve accountability and transparency

#### **GRADUATE PROGRAM MISSION**

The Ph.D. program at the Department of Pharmacology is designed to advance scientific excellence and promote equity, diversity and inclusion. Our mission is to support graduate students and trainees at every phase of their careers with a focus on education, research, and community outreach.





## **GENERAL INFORMATION AND RESOURCES**



Academic Student Employees (ASEs) are represented by United Auto Workers (UAW) Local 4121. For complete details, refer to the ASE contract.

#### **PAYDAYS**

Payday is the 10<sup>th</sup> and 25<sup>th</sup> of each month. However, if payday is on a Saturday, you will be paid Friday before. If payday is on a Sunday, you will be paid on Monday. For detailed information visit the UW ISC Payday webpage: https://isc.uw.edu/your-pay-taxes/paydays/

Please sign up for direct deposit: https://isc.uw.edu/your-pay-taxes/direct-deposit/

#### (A note from UW ISC:

Your payment election in Workday only directs the deposit of your UW paycheck. If you also receive financial aid or refunds for tuition and fees, and would like any balance transferred directly to your bank account, you will need to additionally enroll in the Direct Deposit Transfer program by selecting the Direct Deposit icon found on the Student Fiscal Services homepage.)

#### **TUITION and STUDENT FEES**

Your ASE appointment provides a tuition and fees waiver for each quarter. The waiver covers the operating fee, building fee, and technology fee. The waiver should be applied to your student account by the third week of each quarter. If you notice that you have a tuition balance at the beginning of the third week, please contact Sarah Robinson (<a href="mailto:sr25@uw.edu">sr25@uw.edu</a>) and copy Debbie Bale (<a href="mailto:db29@uw.edu">db29@uw.edu</a>).

Students are responsible for paying the following required student fees each quarter: Facilities Renovation fee, IMA Bond fee, and Services and Activities fee. These will be \$265 per quarter in Autumn, Winter, and Spring, and \$75.71 in Summer quarter. Fees are typically adjusted in July of each year.

**Fees are due on the third Friday of each quarter.** For more information on what is covered, please visit the Student Fiscal Services: <a href="https://finance.uw.edu/sfs/tuition/ase">https://finance.uw.edu/sfs/tuition/ase</a>

#### **TIME OFF POLICIES**

Please review the time off policies for Academic Student Employees (ASEs): <a href="https://hr.uw.edu/studentemployment/time-off-and-leave-policies/academic-student-employees/time-off-policies/">https://hr.uw.edu/studentemployment/time-off-and-leave-policies/academic-student-employees/time-off-policies/</a>

A PDF guide is available to help you track your time off: <a href="https://hr.uw.edu/studentemployment/wp-content/uploads/sites/4/2022/07/ASE-time-off-tracking-guide-20220721">https://hr.uw.edu/studentemployment/wp-content/uploads/sites/4/2022/07/ASE-time-off-tracking-guide-20220721</a> a11y.pdf

If you have any questions, a help FAQ page is also available: <a href="https://hr.uw.edu/studentemployment/time-off-and-leave-policies/academic-student-employees/salaried-ase-time-off-faqs/">https://hr.uw.edu/studentemployment/time-off-and-leave-policies/academic-student-employees/salaried-ase-time-off-faqs/</a>

#### **UW GRADUATE STUDENT INSURANCE**

Graduate Appointee Insurance Program (GAIP):

GAIP covers medical, vision, and dental care for teaching assistants, research assistants, tutors, predoctoral researchers, and other Academic Student Employees. Benefits are negotiated between the union and the university, and is administered by LifeWise.

https://hr.uw.edu/benefits/insurance/health/graduate-appointees/gaip-eligibility-coverage-overview/



#### **UW HUSKY CARD**

To obtain your Husky Card visit the Husky Card Account & ID Center located in Odegaard Undergraduate Library, ground level.

Phone: 206-543-7222 Email: huskycrd@uw.edu

Entrance is through the outer building doors on the ground floor level of the building. The Husky Card Office is not located within the library itself.

Your Husky Card gives you access to the Health Sciences buildings, restricted research labs, regional and transit (U-PASS). It can be used to purchase food and beverages on campus by depositing funds into your account. Check out what you can do with your Husky Card: <a href="https://huskycardprogram.uw.edu/">https://huskycardprogram.uw.edu/</a>

#### **UW TRANSPORTATION**

For U-PASS and parking information, visit the UW Transportation Services website: https://transportation.uw.edu/

#### **UW CAMPUS RESOURCES**

If you or someone you know needs support or assistance, please visit the Graduate School's Campus Resources webpage: <a href="https://grad.uw.edu/current-students/student-success/campus-resources/">https://grad.uw.edu/current-students/student-success/campus-resources/</a>

#### **UW Allies Program**

The UW Allies program serves graduate students and postdoctoral scholars in basic science labs at UW. Allies are faculty who provide trainees with support during conflict with mentors and lab mates, assistance in navigating institutional barriers to success, and connection with institutional and community services. Allies stand in solidarity with trainees, so they don't have to face challenges alone. For more information and to request an Ally, go to <a href="https://sites.uw.edu/uwallies">https://sites.uw.edu/uwallies</a>

#### **UW SafeCampus**

UW SafeCampus is a violence prevention and response program that supports students, faculty, and staff. Available 24 hours / 7 days a week

Phone: 206-685-7233

https://www.washington.edu/safecampus/

#### **UW Hall Health**

Hall Health provides medical care, mental health care, and gender affirming care to students.

Phone: 206-685-1011

https://wellbeing.uw.edu/unit/hall-health/

#### UW LiveWell

UW LiveWell is a center for student advocacy and training. Program and services include Alcohol and Drug Education, Peer Health Educator, Student Care, Suicide Intervention Program, Survivor Support and Advocacy.

Phone: 206-543-6085

https://wellbeing.uw.edu/unit/livewell/

#### **UW Food Pantry**

https://www.washington.edu/anyhungryhusky/the-uw-food-pantry/



#### **DEPARTMENTAL RESOURCES**

Please refer to the link below for administrative staff roles, responsibilities, and contact information. <a href="https://pharmacology.uw.edu/wp-content/uploads/2023/09/Phcol-Administrative-Staff-Roles-Responsibility-Matrix.pdf">https://pharmacology.uw.edu/wp-content/uploads/2023/09/Phcol-Administrative-Staff-Roles-Responsibility-Matrix.pdf</a>

Additional departmental information can be found at: <a href="https://pharmacology.uw.edu/department-resources/">https://pharmacology.uw.edu/department-resources/</a>

#### **RESIDENCY STATUS CHANGE**

We strongly recommend that out of state students apply for a change in residency status once they become eligible. To qualify on must residing in the state for at least 12 months, relinquishing all valid legal ties with their former state, and creating legal ties to the state of Washington. For more information please visit: <a href="https://registrar.washington.edu/residency/residency-requirements/">https://registrar.washington.edu/residency/residency-requirements/</a>





# **GRADUATE PROGRAM REQUIREMENTS**



#### **UW GRADUATE SCHOOL REQUIREMENTS**

In order to qualify for the doctoral degree, it is the responsibility of the student to meet the following Graduate School minimum requirements:

- Completion of a program of study and research as planned by the graduate program
  coordinator in the student's major department or college and the Supervisory Committee. At
  least 18 credits of course work at the 500 level and above must be completed prior to
  scheduling the General Examination.
- 2. Presentation of 90 credits, 60 of which must be taken at the University of Washington. With the approval of the degree-granting unit, an appropriate master's degree from an accredited institution may substitute for 30 credits of enrollment.
- 3. Numerical grades must be received in at least 18 quarter credits of course work taken at the UW prior to scheduling the General Examination. The Graduate School accepts numerical grades in department approved 400-level courses accepted as part of the major and in 500-level courses. This excludes 499 credits. A minimum cumulative GPA of 3.00 is required for a graduate degree at the University.
- 4. Creditable passage of the General Examination. Registration as a graduate student is required the quarter the exam is taken and candidacy is conferred.
- 5. Preparation of and acceptance by the Dean of the Graduate School of a dissertation that is a significant contribution to knowledge and clearly indicates training in research. Credit for the dissertation ordinarily should be at least one-third of the total credit. The Candidate must register for a minimum of 27 credits of dissertation over a period of at least three quarters. At least one quarter must come after the student passes the General Examination. With the exception of summer quarter, students are limited to a maximum of 10 credits per quarter of dissertation (800).
- 6. Creditable passage of a Final Examination, which is usually devoted to the defense of the dissertation and the field with which it is concerned. The General and Final Examinations cannot be scheduled during the same quarter. Registration as a graduate student is required the quarter the exam is taken and the degree is conferred.
- 7. Completion of all work for the doctoral degree within ten years. This includes quarters spent On-Leave or out of status as well as applicable work from the master's degree from the UW or a master's degree from another institution, if applied toward one year of resident study.
- 8. Registration maintained as a full- or part-time graduate student at the University for the quarter in which the degree is conferred (see detailed information under Final Quarter Registration).
- 9. A student must satisfy the requirements that are in force at the time the degree is to be awarded.



#### **UW Graduate School Policies and Student Conduct Code**

Please review the Graduate School's policies and the UW's Community Standards & Student Conduct webpages.

**Graduate School Policies:** 

https://grad.uw.edu/grad-school-policies/

Community Standards & Student Conduct

https://www.washington.edu/cssc/for-students/student-code-of-conduct/



#### **UW PHARMACOLOGY GRADUATE PROGRAM ADMISSION REQUIREMENTS**

A baccalaureate degree with a major in any of the sciences, such as biochemistry, chemistry, pharmacy, physics, physiology, psychology, or zoology, is strongly advised. Students are selected from the applicant pool based on several criteria, including academic performance, letters of recommendation, and previous research experience. GRE scores are not required.

#### **UW PHARMACOLOGY GRADUATE PROGRAM REQUIREMENTS**

All new students will meet with the Graduate Program Advisor before the start of classes in Autumn quarter. Students are required to complete a minimum of 90 credits which should include the following:

- Pharmacology 501-506 course series with a minimum grade of 2.7 for each course.
- Pharmacology 507 throughout graduate school (must attend 5 seminars).
- Pharmacology 514 in the first and second years of graduate study.
- Pharmacology 519 (laboratory rotations) during the first year of graduate study.
- Four advanced courses in Pharmacology.
- CONJ 531 (Signaling Mechanisms in Excitable Cells)
- One Quantitative Analysis course.
- Creditable passage of the General Examination. Thesis research beginning the second and subsequent years of study.
- Completion of an approved PhD dissertation and creditable passage of the Final Examination, which is the defense of the dissertation.



#### **First Year**

Students engage in three different laboratory rotations and take classes in different aspects of pharmacology. The rotations provide students the opportunity to work in different lab environments, one of which will ultimately become their dissertation laboratory.

#### **Fall Quarter:**

PHCOL 501 – Drug Discovery and Emerging Therapeutics (2 credits)

PHCOL 502/CONJ 532 – Signal Transduction from the Cell Membrane to the Nucleus (2 credits)

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 514 – Current Topics in Pharmacology (1 credit)

PHCOL 519 – Introduction to Laboratory Research in Pharmacology (4 credits)

PHCOL 550 – Introduction to the Department (1 credit)

CONJ 531 – Signaling Mechanisms in Excitable Cells (1.5 credits)

#### **Additional Courses:**

Students can take one Advanced Pharmacology course and/or additional graded approved courses selected from the list of approved courses. Students should not register for more than 18 total credits.

#### Winter Quarter:

PHCOL 503- Autonomic/Cardiovascular Pharmacology (2 credits)

PHCOL 504 – Neuropharmacology (2 credits)

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 514 - Current Topics in Pharmacology (1 credit)

PHCOL 519 – Introduction to Laboratory Research in Pharmacology (4 credits)

#### Additional Courses:

Students can take one Advanced Pharmacology course and/or additional graded approved courses selected from the list of approved courses. Students should not register for more than 18 total credits.

#### **Spring Quarter:**

PHCOL 505 – Endocrine Pharmacology (2 credits)

PHCOL 506 – Immunopharmacology and Chemotherapy (2 credits)

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 514 – Current Topics in Pharmacology (1 credit)

PHCOL 519 – Introduction to Laboratory Research in Pharmacology (4 credits)

#### **Additional Courses:**

Students can take one Advanced Pharmacology course and/or additional graded approved courses selected from the list of approved courses. Students should not register for more than 18 total credits.

#### **Summer Quarter:**

Register for UCONJ 510 (2 credits)  $\underline{OR}$  PHCOL 600 – Research (2 credits)

(UCONJ 510 space is limited, register early!)

Students should register for 2 credits MAX.

<u>Biomedical Research Integrity Lecture Series</u>: Students attend a minimum of 2 lectures and 2 discussion sessions.



#### **Student Advising and Evaluation**

Dr. Edith Wang advises first-year graduate students and is responsible for overseeing the activities of individual students including course registration, laboratory rotation selection, and selection of their thesis advisor and Doctoral Thesis Supervisory Committee members. Students will meet with Dr. Wang, as their first-year advisor, at least once each quarter prior to registration to discuss the best course of study and plan their schedules.

The progress of Pharmacology students is reported quarterly to the Pharmacology Faculty. This report is based on the student's performance during lab rotations and coursework.

At the end of the Spring Quarter of the first year, students select a thesis advisor (with the approval of the Department Chair) who will be the Chair of their Doctoral Thesis Supervisory Committee.

#### **Laboratory Rotations**

Laboratory rotations are designed to provide first-year students with an opportunity to gain hands-on experience with the theoretical and technical approaches to research that are practiced in different laboratories. This experience helps students to select a permanent lab in which to conduct their thesis research. Students complete three 10-week rotations in the labs of their choice during the Autumn, Winter, and Spring quarters of their first year.

At the completion of each laboratory rotation, students provide a title and abstract describing the objectives, results, and conclusions of their research project and present a short research talk to fellow students and faculty in the Pharmacology Department. The rotation advisor provides a numerical grade and written evaluation of the student's performance in the lab and the rotation talk. The student receives a copy of the evaluation, which becomes a part of the student's academic file.

Students with a Master's degree and significant research experience may petition the Pharmacology Graduate Program Committee to reduce the number of laboratory rotations required before selecting a thesis advisor.

#### **Selection of Dissertation Advisor**

By the end of the eighth week of Spring quarter (mid-May), each student must notify Dr. John Scott (Pharmacology's Chair) of their first and second choices for a thesis advisor. Finding a mentor who agrees to accept the student into his/her lab is a qualifying step for continuation in the Pharmacology graduate program and a successful graduate career.

With the approval of the Department Chair and completion of their Spring Quarter rotation, the student moves to their thesis advisor laboratory for the remainder of their graduate studies.

#### **Biomedical Research Integrity**

The summer series on Biomedical Research Integrity (BRI) was developed by the UW School of Medicine in response to a directive from the National Institutes of Health (NIH) requiring that all graduate students supported by NIH training grants be provided with training in the ethics of research. Additionally, the Medical School Executive Committee recommends that all trainees, regardless of funding source, participate in the BRI Series during their training.



The Department of Pharmacology requires all Pharmacology graduate students to complete the course in research ethics during their study in the department. It is a requirement for graduation, whether or not you may be supported on a NIH training grant. The Department office will receive an attendance sheet; the fulfillment of the requirement is documented.

It is required that first-year students take a minimum of two lectures and two discussion groups from the Biomedical Research Integrity Series. When you are on a training grant, it is essential to check with the administrators of the training grant every year to ensure compliance with specific requirements for your training grant.



#### **Second Year**

Students begin work on their dissertation research project, select their Doctoral Supervisory Committee, and prepare for the written portion of the General Exam.

#### **Fall Quarter:**

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 514 – Current Topics in Pharmacology (1 credit)

PHCOL 560-577 (1 credit) Register for your Thesis Advisor's laboratory meeting course.

PHCOL 600 - Research (Variable credits)

The number of credits to register for will vary. Student must register for at least 10 total credits and no more than 18 total credits during any given Quarter, except Summer Quarter.

#### Additional Courses:

Students can take one Advanced Pharmacology course and/or additional graded approved course.

#### Winter Quarter:

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 514 - Current Topics in Pharmacology (1 credit)

PHCOL 560-577 (1 credit) Register for your Thesis Advisor's lab meeting course.

PHCOL 600 - Research (Variable credits)

See Autumn Quarter for explanation.

#### Additional Courses:

Students can take one Advanced Pharmacology course and/or additional graded approved course.

#### **Spring Quarter:**

PHCOL507 – Pharmacology Seminar (1 credit)

PHCOL 514 – Current Topics in Pharmacology (1 credit)

PHCOL 560-577 (1 credit) Register for your Thesis Advisor's laboratory meeting course.

PHCOL 600 - Research (Variable credits)

See Autumn Quarter for explanation.

#### Additional Courses:

Students can take one Advanced Pharmacology course and/or additional graded approved course.

#### **Summer Quarter:**

PHCOL 600 - Research (1 credit)

PHCOL 560-577 (1 credit)

Students register for their Thesis Advisor's laboratory meeting course. Students should not register for more than 2 total credits during Summer quarter.



#### **Teaching Requirement**

Teaching experience is considered an important aspect of training in the Pharmacology graduate program. Students serve as Teaching Assistants for one quarter of the Pharmacology 500 series during their second year or may choose to participate in a community outreach teaching experience. The TA experience begins with participation in the TA workshop on Teaching & Learning offered by UW in September. TA responsibilities for courses include attending all sessions, supporting 1st year graduate students, preparing and delivering lectures, management of class discussion and grading of student presentations.

If you prefer to participate in a community outreach TA experience, please contact Dr. Stan McKnight (mcknight@uw.edu) for more details.

University of Washington Resources for Teaching: http://www.washington.edu/teaching

#### **Choosing Your Doctoral Supervisory Committee**

During the Autumn Quarter of the second year, students (with the advice of the Thesis Advisor and the Graduate Program Committee) select faculty members to serve on their Doctoral Thesis Supervisory committee. The Doctoral Thesis Supervisory Committee consists of the thesis advisor, Graduate School Representative (GSR), and Pharmacology faculty and faculty members from other departments most familiar with the student's dissertation research area.

At least five, but no more than seven faculty members are recommended on the Doctoral Thesis Supervisory Committee. The majority of the Committee members should have a primary appointment in the Department of Pharmacology. At least one, but no more than three (including the Graduate School Representative), should hold primary appointments outside of the Department of Pharmacology. Only one committee member may be a faculty member who is not a member of the Graduate Faculty. The chair of the Doctoral Thesis Supervisory Committee (Thesis Advisor) and the Graduate School Representative (GSR) must be in attendance at the General Examination and at the Final Examination. *Criteria for selecting the Graduate School Representative (GSR)* 

- The GSR cannot have an appointment within the Pharmacology department
- The GSR has no conflict of interest with the committee chair(s)/student (i.e., budgetary, familial, romantic).
- The GSR must be a Graduate Faculty member with an endorsement to chair doctoral committees.
- The GSR cannot have an affiliate or adjunct appointment with the Pharmacology department.

The names of Committee members must be submitted to Debbie Bale, who submits the information to the Graduate School with the authority of the Graduate Program Director.



#### Individual Development Plan (IDP) Preliminary Review

Pharmacology graduate students in their second year of graduate school are required to create an IDP and schedule a preliminary review that will prepare them for a successful future career. Please see the following guidelines for details about "Creating an IDP".

#### **Preliminary Review**

For the preliminary review, you should plan to present the general area/ideas of your thesis project. The primary purpose is to allow committee members to provide feedback on your potential thesis project and to help you formulate the actual specific aims of your future General Exam research proposal. This meeting also will allow you to get to know your committee members before your General Exam.

Students are required to convene a preliminary review meeting with their committee members before the end of Winter quarter of their second year.

#### **Written Component of General Examination**

The written portion of the General Examination is scheduled by Dr. Wang during the month of June or July for graduate students to take at the end of their second year. The purpose of this examination is to evaluate the student's knowledge and understanding of basic pharmacology and the medical sciences (e.g., biochemistry, physiology, molecular/cellular biology, etc.) and their ability to apply this knowledge. The exam is take-home and consists of questions written by members of the Pharmacology faculty.

Questions will be graded by the authoring faculty members and an evaluation of overall performance on the exam will be provided to each student. Areas of perceived weakness will be noted and may be reexamined during the oral portion of the General Examination. Results of the Written General Examination will be included as a permanent part of the student's record.



#### **Third Year**

The student continues on dissertation work and takes the oral General Examination.

#### **Third Year Courses**

#### Fall Quarter:

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 560-577 (1 credit)

Students register for your Thesis Advisor's laboratory meeting course.

PHCOL 600 - Research (Variable credits)

Students can take one Advanced Pharmacology course and/or additional graded approved course. Students should not register for more than 18 total credits.

#### Winter Quarter:

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 560-577 (1 credit)

Students register for their Thesis Advisor's laboratory meeting course.

PHCOL 800 - Research (Variable credits)

For students who have passed the Pharmacology written and oral General Examinations. The number of credits to register for will vary. Students must be registered for a minimum of 10 total credits and no more than 18 total credits each Quarter (except Summer Quarter).

Students can take one Advanced Pharmacology course and/or additional graded approved course. Students should not register for more than 18 total credits.

#### **Spring Quarter:**

PHCOL 507 - Pharmacology Seminar (1 credit)

PHCOL 560-577 (1 credit)

Students register for Thesis Advisor's laboratory meeting course.

PHCOL 800 - Research (Variable credits)

Students can take one Advanced Pharmacology course and/or additional graded approved course. Students should not register for more than 18 total credits.

#### **Summer Quarter:**

PHCOL 560-577 (1 credit)

Students register for their Thesis Advisor's laboratory meeting course.

PHCOL 800 – Doctoral Dissertation (1 credit)

\*Students supported by a training grant may need to attend required Biomedical Research Integrity Lecture Series lectures and discussions. Check with your training grant administrator for specific details.



#### **Oral Component of General Examination**

Students schedule the oral General Examination, which is administered by the Doctoral Thesis Supervisory Committee, during the Fall Quarter of their third year of graduate studies. The oral General Examination is chaired by a departmental faculty member who is not the Thesis Advisor. The chairing faculty member will be designated by the Thesis Advisor prior to the exam with the concurrence of the Graduate Program Committee. The examination is based, in part, on an evaluation of the student's proposed research for the dissertation and on his or her knowledge of the disciplines important to the research.

A short thesis research proposal (in the style of an NIH F31 NRSA proposal) will be provided by the student to his/her Doctoral Thesis Supervisory Committee members at least one week prior to the oral General Examination. During the oral examination, the student will present the background for the proposed research, thesis proposal, and dissertation research progress. This will be followed by questions from the Doctoral Thesis Supervisory Committee on issues related to the background and thesis proposal.

- 20-minute uninterrupted talk on background
- 20-minute faculty questions on foundational knowledge of their fields
- 20-minute uninterrupted talk on proposed research
- Up to 60 minutes faculty questions the proposed research, general knowledge of pharmacology and related disciplines

The duration may be influenced by the student's previous performance on the written general examination and in-class work. Each Committee member will be invited to ask a series of questions on general knowledge.

On the basis of an evaluation of student performance on all portions of the general examination (written general examination, oral presentation, and defense of the thesis proposal), the committee recommends one of the following: 1) approval of candidacy towards the Ph.D. degree, 2) further work and subsequent reexamination (over specific areas or in total), or 3) termination from the program.

After successful completion of the oral General Examination, graduate students enroll in PHCOL 800 rather than PHCOL 600. This reflects the change in status from a pre-candidate to a candidate for the doctoral degree.



#### **Steps To Your Oral General Examination**

- 1. Contact your Thesis Advisor and committee members to find a suitable date. Your Graduate School Representative (GSR), Thesis Advisor, and two other committee members must be in attendance. When you have confirmed the date and time with your committee, notify Debbie Bale (db29@uw.edu) and a suitable location will be scheduled.
- 2. After you have a room reservation, date, and time for your oral General Examination, you will need to submit your request for a General Examination online through MyGrad: <a href="https://grad.uw.edu/mygrad-program/">https://grad.uw.edu/mygrad-program/</a> at least three weeks in advance of the exam date. Notify Debbie after you have submitted your request so that she can approve the date and time of your exam.
- 3. At least two weeks before the oral General Examination, a written description of your thesis proposal must be circulated to your supervisory committee for them to review. A copy should be given to Debbie for your file. Specific guidelines for the written thesis research proposal will be provided to students at the beginning of the Fall quarter in their 3rd year.
- 4. Prior to the oral General Examination, Debbie will provide the necessary warrant that will be given to your Advisor. Each member of your supervisory committee who is present must sign the document.

If it is not possible to schedule your oral General Examination by the stated deadline, please contact Dr. Edith Wang (<a href="mailto:ehwang@uw.edu">ehwang@uw.edu</a>).



#### **Fourth and Subsequent Years**

The student continues with their dissertation research and prepares for their dissertation defense.

#### Courses

#### Fall/Winter/Spring Quarter:

PHCOL 507 – Pharmacology Seminar (1 credit)

PHCOL 560-577 (1 credit)

Students register for your Thesis Advisor's laboratory meeting course.

PHCOL 800 – Doctoral Dissertation (Variable credits)

#### **Summer Quarter:**

PHCOL 560-577 (1 credit)

Students register for their Thesis Advisor's laboratory meeting course.

PHCOL 800 – Doctoral Dissertation (1 credit)

#### **Annual Review of Dissertation Progress**

In Winter quarter of your fourth year and each subsequent years until the doctoral defense, the student will be reviewed annually by their Doctoral Thesis Supervisory Committee regarding their dissertation progress. The student prepares a two-page status report, which is circulated to the Doctoral Thesis Supervisory Committee and meets with the Committee for a discussion of their dissertation research progress and future plans. The annual review must be completed by the end of the Winter Quarter each year.

#### **Laura Sheard Graduate Lecture**

Fourth year students will select the lecture speaker and will consult with the department's seminar cochairs prior to inviting the speaker. Student will also host a lunch and dinner with the speaker. Full details will be shared before the beginning of your fourth year. To learn more about the lecture, please visit: https://pharmacology.uw.edu/seminars/laura-sheard-lecture/

#### **Final Examination**

When you and your supervisory committee have agreed you are ready to graduate, you will select a Reading Committee, a subgroup of at least three members of your Supervisory Committee, who will be appointed to read and approve your dissertation. It is the responsibility of a Reading Committee to (a) ensure that the dissertation is a significant contribution to knowledge and is an acceptable piece of scholarly writing; (b) determine the appropriateness of a candidate's dissertation as a basis for issuing a warrant for a Final Examination and; (c) approve a candidate's dissertation.

Once you have selected the Reading Committee, contact Debbie Bale (<a href="mailto:db29@uw.edu">db29@uw.edu</a>) with the names of your choice, Debbie will enter the Reading Committee member names into MyGrad to inform the Dean of the Graduate School. Your Reading Committee will approve your dissertation online through the MyGrad Committee View portal. Instructions will be given to them by email from the Graduate School.

Next, you will need to select a date for the thesis defense that is acceptable to your Supervisory Committee members and you. After a date has been selected, contact Debbie to reserve a room for your defense. After a room has been reserved, log In to MyGrad: <a href="https://grad.uw.edu/mygrad-program/">https://grad.uw.edu/mygrad-program/</a> to schedule your doctoral final exam. Contact Debbie after you have entered the information in MyGrad for approval.



The other formalities regarding the final submission of your dissertation are all detailed very nicely, with each step delineated, at the following website: <a href="https://grad.uw.edu/current-students/enrollment-through-graduation/graduation-requirements/">https://grad.uw.edu/current-students/enrollment-through-graduation-requirements/</a>

If you have any questions, please contact Debbie.

### **UW Pharmacology Requirements**

	Autumn Quarter	Winter Quarter	Spring Quarter	Summer Quarter	
Year 1	PHCOL 501 (2 CR) - Drug Discovery/EMRG Therapy PHCOL 502/CONJ 532 (2 CR) - Signal Transduction PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 514 (1 CR) - Current Topics in Pharm PHCOL 519 (4 CR) - Lab Rotation PHCOL 550 (1 CR) - Faculty Research CONJ 531 (1.5 CR) - Signaling Mechanisms  Advanced Courses***	PHCOL 503 (2 CR) - Autonomic/Cardio Pharm PHCOL 504 (2 CR) - Neuropharmacology PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 514 (1 CR) - Current Topics in Pharm PHCOL 519 (4 CR) - Lab Rotation Advanced Courses***	PHCOL 505 (2 CR) - Endocrine Pharm PHCOL 506 (2 CR) Immunopharm & Chemo PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 514 (1 CR) - Current Topics in Pharm PHCOL 519 (4 CR) - Lab Rotation  Advanced Courses***	UCONJ 510 (2 CR) Introductory Laboratory Based Biostatistics  Biomedical Research Integrity Lecture Series: Students attend a minimum of 2 lectures and 2 discussion sessions.	
Task	Rotation Talk	Rotation Talk	Rotation Talk Select first and second choices for a thesis advisor.	Coordinate TA-ship with Dr. Stan McKnight	
Year 2	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 514 (1 CR) - Current Topics in Pharm PHCOL 560-583** PHCOL 600 Research (up to 10 credits)  Advanced Courses***	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 514 (1 CR) - Current Topics in Pharm PHCOL 560-583** PHCOL 600 Research (up to 10 credits) Advanced Courses***	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 514 (1 CR) - Current Topics in Pharm PHCOL 560-583** PHCOL 600 Research (up to 10 credits)  Advanced Courses***	PHCOL 560-583** (1 CR) PHCOL 600 (1 CR)	
Task	Complete TA Training Program Selection of Doctoral Supervisory Committee Members	Schedule Committee meeting.		Complete Written Component of General Examination	
Year 3	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 560-583** PHCOL 600 Research (up to 10 credits) Advanced Courses***	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 560-583** PHCOL 800 Research (up to 10 credits) Advanced Courses***	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 560-583** PHCOL 800 Research (up to 10 credits) Advanced Courses***	PHCOL 560-583** (1 CR) PHCOL 800 (1 CR)	
Task	Complete Oral General Examination				
Year 4 & Beyond	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 560-583** PHCOL 800 Research (up to 10 credits)	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 560-583** PHCOL 800 Research (up to 10 credits)	PHCOL 507 (1 CR) - Pharmacology Seminar PHCOL 560-583** PHCOL 800 Research (up to 10 credits)	PHCOL 560-583** (1 CR) PHCOL 800 (1 CR)	
Task		Schedule Committee meeting.			
NOTES:	*Student should not register for more than 18 total credits in AUT, WIN, & SPR Quarters. 2 credits in SUM Quarter.  **Students register for the appropriate lab meeting course (if offered) for the remainder of their graduate career.  ***Students can take one Advanced Pharmacology course and/or additional graded course. For approval, please contact Dr Edith Wang.				