Department of Biology Graduate Student Guidelines

Preamble

The Department of Biology considers graduate research, teaching, and mentoring to be among its most important missions. It is in the mutual interest of graduate students and faculty that an advanced degree from the department be recognized worldwide as evidence of outstanding scholarship and creativity. These guidelines are intended to provide a framework for graduate students and their Supervisory Committees in crafting a comprehensive program of graduate study that allows each student to acquire and demonstrate research competence, communication skills, breadth of knowledge, and teaching ability.

This document summarizes the procedures, policies, and requirements for advanced degrees in the department, in addition to the procedures, policies, and requirements set forth by the University of Washington Graduate School.

These guidelines have been prepared as a reference for graduate students, and for the faculty who serve on their Supervisory Committees. The guidelines define the minimum criteria for successful completion of advanced degrees within the department, but individual Supervisory Committees may impose additional requirements as appropriate. A student may petition the Graduate and Postdoctoral Program Committee for amendment or removal of any requirement in these guidelines.

Requirements for the Ph.D. degree in Biology

Each of the items enumerated below is explained in more detail in subsequent sections of this document, but a summary of departmental requirements is presented here for quick reference by faculty and students.

- 1. Satisfy <u>UW Graduate School requirements</u> for enrollment, residence, scholarship, examination, and other relevant policies.
- 2. Have or obtain an academic background equivalent to that required of students receiving a bachelor of science degree from the department. Assessment of background and requirements for any remedial work will be made in the student's prescription meeting with a Temporary Committee just prior to the beginning of Autumn Quarter classes in the student's first year of residence.
- 3. Request appointment of a Supervisory Committee, no later than November 1 of the second year in residence.
- 4. After formation of the Supervisory Committee, meet at least once annually with the Supervisory Committee and submit committee report forms to document the meeting.
- 5. Take the General Exam, no later than Spring Quarter of the second year in residence. This General Exam includes a formal written proposal outlining research plans, which is sent to all members of the Supervisory Committee for written comments prior to the oral exam.
- 6. Hold an appointment as a teaching assistant (TA) for at least two quarters while in residence.
- 7. Request appointment of a <u>Dissertation Reading Committee</u> no later than beginning of the quarter of anticipated graduation.
- 8. Successfully defend the doctoral dissertation at the public oral Final Examination.
- 9. Obtain the signatures of all members of the Dissertation Reading Committee on the <u>Doctoral Dissertation Reading Committee Approval</u> Form prior to submitting the dissertation to the Graduate School.

Academic Background and Preparation for the Ph.D. Program

Prior to registration for Autumn Quarter classes in the student's first year in residence, the student will meet with a Temporary Committee consisting of the student's temporary advisor (a faculty member in the student's proposed area of research, appointed by the Graduate Program Chair), the Graduate Program Chair, the other faculty members on the Graduate & Postdoctoral Program Committee, and a graduate student member of the Graduate & Postdoctoral Program Committee. The purpose of this meeting is to:

- welcome the student to the department,
- answer any questions the student may have,
- provide information about opportunities for coursework and research,
- assess the student's academic background compared to the requirements for a BS degree from our department (see below),
- develop a list of required actions to correct any perceived deficiencies in background, and
- recommend courses likely to be of value to the student in the first year or two of study.

The Temporary Advisory Committee will use the following list of required coursework for a BS in Biology as a comparison for a first year student's transcript:

- 3 quarters foundational/core biology
- 2 quarters of inorganic chemistry
- 2 quarters of organic chemistry
- 2 quarters of physics
- 2 quarters of mathematics (including statistics and data science)
- 1 quarter of genetics
- 1 quarter of biodiversity
- 1 course from at least three of the areas below (with a lab component for at least 2 of the areas):
 - Biology & Society;
 - Ecology:
 - Evolution & Systematics;
 - Molecular, Cellular & Developmental Biology;
 - Physiology

If the Temporary Advisory Committee determines that the student needs to correct one or more academic deficiencies to prepare for graduate study, the Graduate Program Chair will send the student a prescription letter consisting of required coursework, TA assignments, or other suitable tasks chosen to allow the student to develop proficiency in the identified area(s). A copy of the prescription letter will be placed in the student's file. The student and the Supervisory Committee are responsible for verifying that requirements in the prescription letter have been met prior to scheduling the General Examination. Changes to the prescription letter may be requested via petition to the Graduate Program Chair.

The First Year in Residence

During the first year in residence, all graduate students will participate in at least three, and no more than four, rotations and/or tutorials (definitions below), or combination thereof. The goals of this unified experience are to:

- To foster collaboration and community throughout the department
- To learn and reinforce fundamental biological principles
- To help the student create a learning community as it relates to their research
- To develop a student's scientific reading, writing, quantitative, critical thinking, and presentation skills
- To hone a student's research interests toward a specific dissertation project
- To introduce a student to the rigors of high caliber research
- To provide a framework to support a student's first year graduate school experience

A **rotation** is a 10-week internship with a Biology faculty member. Any first year student is permitted to engage in a rotation. The goal of a rotation is to thoroughly introduce a student to the lab's research and culture through actively engaging with the theory, methods, and current research as well as participating in lab meetings, ongoing experiments, and other lab activities. There should be an accomplished product at the end of a rotation, such as a completed experiment, literature review, tangible skill learned, etc. The faculty is expected to meet at least every other week with the student to guide readings and research in the field, as well as discuss lab culture and current projects. The student is expected to attend the faculty's lab meetings for the duration of the quarter. Upon completion of the ten-week visit, the student and faculty should meet for an exit interview during which the student's learning is discussed, as well as expectations for the First Year Review Conversation (see below).

A student must contact faculty directly to arrange a rotation quarter. Faculty outside of the department may host a rotating Biology student, so long as that faculty member agrees to the tenets of the goals of a rotation. If a student chooses to be directly admitted to a lab, the home lab may count as one rotation out of the total number of rotations/tutorials. The student should register for four credits of BIOL 504 during a rotation.

A **tutorial** is an intensive 5-week course of study with a Biology faculty member. The goal of a tutorial is to introduce the student to theory, methods, and current research in the designated faculty's research area, as well as providing a structured opportunity for the student to practice scientific discourse. The faculty should provide weekly readings, and meet once per week to allow the student to summarize and discuss the content of the readings with the faculty member. This time is to be student-led, with the faculty providing mentorship, guidance, and clarification. The student is encouraged to attend the faculty's lab meetings, courses, or seminars for at least the duration of the tutorial. Upon completion of the five-week visit, the student and faculty should meet for an exit interview during which the student's learning is discussed, as well as expectations for the First Year Review Conversation.

Tutorials will be offered in Fall, Winter and Spring Quarters. Students are responsible for contacting faculty directly to secure a place in the faculty member's tutorial. A student may also choose to set up a tutorial independently with a faculty member outside of the department, so long as that faculty member agrees to the tenets of the tutorial program. The student should register for two credits of BIOL 504 for a tutorial.

Students will discuss potential faculty to rotate and/or have a tutorial with during their prescription meeting. It is advised that incoming students identify potential faculty prior to this meeting by reviewing the department website.

During finals week of the student's first year in residence, each student will participate in a **First Year Review Conversation.** The first year review meeting is a 90-minute meeting aimed at discussing the student's breadth of knowledge prior to entering into the more research-intensive second year. The conversation includes the student's three (or four, if preferred) faculty with whom they participated in a rotation/tutorial. The conversation is expected to focus on what the student studied during their time under each participating faculty member's mentorship. Based on the conversation, further areas of study may be recommended to ensure the student is set up for success in their research and General Exam. A document summarizing the conversation will be compiled by the student, and sent to the faculty present for the conversation (for confirmation) and the Graduate Program Manager for filing. This document will be presented to the student's future Supervisory Committee Chair (i.e., Advisor) and Supervisory Committee members for review during the General Exam.

In addition to reviewing the student's knowledge of biology, the First Year Review Conversation is aimed at introducing the student to an interaction similar to the General Exam.

Appointment of the Supervisory Committee

The appointment of a doctoral Supervisory Committee indicates that the graduate faculty in the department find the student's background and achievement a sufficient basis for admission into a program of doctoral study and research. The purposes of the Supervisory Committee are to:

- provide guidance and support during the graduate student's career,
- approve a course of study and research appropriate for the student's chosen field.
- conduct and evaluate the research proposal, General Exam, and Final Exam, and
- represent the entire departmental faculty in maintaining high standards of scholarship in the graduate program.

The members of the Supervisory Committee will include at least three faculty members within Biology (tenure-track/tenured, research, emeritus, acting, joint, adjunct, affiliate, lecturer), with at least two of the appointed Biology faculty being voting faculty with graduate faculty status and endorsement to chair (tenure track/tenured, research, lecturer).

In addition to a minimum of three Biology faculty members, a Graduate School Representative (GSR) will also be selected to represent the broad interests of the Graduate School and to attest to the validity of examinations. At least three of these members, including the Advisor (i.e., Supervisory Committee Chair) and GSR, must be members of the graduate faculty with an endorsement to chair doctoral committees, and a majority of the members must be members of the graduate faculty. At least 50% of committee membership must be Biology faculty. If a student's proposed research requires a number of expert faculty outside of the department such that a 50% ratio of Biology faculty cannot be easily maintained, the student may petition the Graduate Program Chair for an exception to this standard.

The GSR is chosen by the student in consultation with the student's Advisor. The GSR must be a member of the Graduate Faculty with an endorsement to chair. The GSR is a voting member of the committee and must attest to the validity of examinations, must indicate approval of the process by which examinations are conducted, must ensure that the student is treated in an unbiased manner, and must represent the Graduate School in ensuring university-wide standards of scholarly performance. The GSR's signature on the warrant affirming the decision of the committee communicates to the Dean of the Graduate School that these responsibilities have been met. The GSR must have no conflict of interest (such as budgetary relationships, primary, joint, or affiliate appointments) with the department, student, or the Advisor. The GSR counts as a "non-Biology" member of the committee when calculating Biology to non-Biology faculty ratios.

Faculty and other professionals holding a PhD or other advanced terminal degree that are not members of the University of Washington may serve on the Supervisory Committee, so long as the ratios of faculty listed above are met. Please note that the department does not provide funding for any committee members' travel to campus for exams or meetings.

The student should file a request to appoint the Supervisory Committee with the Graduate Program Manager, no later than **November 1** of their second year in residence. The Graduate Program Manager will forward the request to the Graduate School to formally initiate a student's Supervisory Committee.

The student may request modifications or changes to their Supervisory Committee at any time, so long as the requirements outlined above continue to be met.

In addition to the guidelines provided here, more details about the responsibilities and regulations governing Supervisory Committees can be found in the Graduate School's Memo 13.

Annual Supervisory Committee Meeting

The purposes of the annual Supervisory Committee Meeting include:

- to review and formally evaluate the student's progress towards the advanced degree,
- determine any requirements above and beyond those enumerated by the department, Temporary Advising Committee, or the Graduate School guidelines,
- give the student an opportunity to make written and oral presentations of research progress,
- provide a forum for the exchange of ideas surrounding the student's research, and
- discuss the student's Individual Development Plan (part of the Committee Report Form) and how they are preparing for their future career.

After the formation of the Supervisory Committee, at least once each academic year, the student will meet with the Supervisory Committee. During the second year in residence, the General Exam counts as this annual meeting (see "General Examination" for more information). At least one week prior to the meeting, the student will provide all committee members with a written report following the format for the Committee Report Form (which includes an Individual Development Plan).

At the conclusion of the meeting, the Advisor will complete the Supervisory Committee Signature Form assessing the student's accomplishments and plans, and detailing any additional requirements. This report will be signed by the student and the attending committee members, and then submitted to the Graduate Program Manager. These reports will be used in the yearly assessment of academic progress of the student. Should the student or any committee member wish to dissent with the majority opinion expressed in the Supervisory Committee Signature Form, the written dissent should be signed, dated, given to the Graduate Program Manager, and attached to the annual report in the student's file.

Should the student not be able to convene a meeting with their entire committee due to reasons beyond their control (i.e., sabbatical, faculty travel, etc.), the student may submit a request to the Graduate Program Chair to have individual meetings with Supervisory Committee members. The student will then draft a memo that summarizes each meeting and future directions for research and other requirements suggested by each committee member. Upon receipt of this memo, faculty will note their agreement with the summation of conversations and direction of work by signing the Supervisory Committee Signature Form. The summary memo should be submitted by the student along with the signed Supervisory Committee Signature Form.

The General Examination

The aim of the General Examination in the Department of Biology is to ensure that graduate students are prepared to advance to candidacy and conduct independent research successfully. The Graduate and Postdoctoral Program Committee has identified these learning objectives to further articulate the goals of the exam:

- The student demonstrates a deep familiarity with the literature in their field.
- The student is able to articulate a research plan that demonstrates knowledge, skill development, and makes a substantial contribution to the field of study.
- The student is able to demonstrate scientific critical thinking skills, including acknowledgement of areas to which their knowledge does not extend.
- The student is able to use this milestone as a time to reflect and develop their own future goals to ensure that obtaining a PhD is the best next step for their career.
- The Supervisory Committee provides written and oral feedback to the student on the direction of research and academic preparation for the Ph.D. degree.

The General Examination should be taken no later than the Spring Quarter of the second year in residence. At least four members of the Supervisory Committee (including the Advisor, Graduate School Representative, and two additional Biology faculty, one of which must have graduate faculty status) must be present at the General Exam. If one of the two additional Biology faculty are serving on the Graduate and Postdoctoral Program Committee, this member will likely serve as the Chair of the Exam. If neither of the additional Biology faculty are on the GPPC, then a faculty member from the GPPC will be appointed to serve as the Chair of the Exam by the Graduate Program Chair (see below for more details). Video conferencing is permitted, however at should the connection be lost at any point and the stated faculty quota not be met, the examination must be halted. Supervisory Committee members joining virtually must send an email to the Advisor and Graduate Program Manager indicating their consent with the majority/dissenting opinion outcome. In addition, all Graduate School guidelines regarding videoconferencing during doctoral examinations must be followed (http://grad.uw.edu/policies-procedures/doctoral-degree-policies/instructions-for-video-conferencing-in-doctoral-examinations/).

To meet the defined learning objectives, the following milestones must be met prior to the General Exam:

| Milestone |
|--|
| Rotations and/or Tutorials |
| First Year Review Conversation (with |
| rotation/tutorial faculty) |
| Student forms Supervisory Committee |
| Student meets individually at least once with |
| committee members to discuss proposed research |
| plans and General Exam expectations (in lieu of a |
| group committee meeting). |
| Student has set exam date with Supervisory |
| Committee. |
| Chair of the Exam is assigned by the Graduate |
| Program Chair |
| Student sends Research Proposal and Committee |
| Report Form to committee for review. |
| Student meets with each committee member to |
| review submitted documents and further prepare |
| for exam. |
| Student submits a revised proposal to committee. |
| - Completion of all prescription requirements |
| - Completion of 18 graded credits at the 400 level |
| or higher with a GPA of 3.0 or higher |
| - Completion of at least 60 total credits (including BIOL 600) |
| |

The Graduate Program Chair will appoint a faculty member of the Graduate & Postdoctoral Program Committee to serve as the **Chair of the General Exam**. The role of the Chair of the Exam is to ensure that the exam is administered in accordance with the format provided, as well as to alleviate administrative responsibilities from the student, allowing the student to focus on the content of their answers. The Chair of the Exam may be a voting member of the student's committee, however a non-member may be selected by request of the student, faculty, or if no current GPPC members serve on the student's Supervisory Committee. The Chair of the Exam will be present during all parts of the exam (see table below) to moderate the conversation as needed, as well as to present the student with the final outcome of the exam once the student is invited back to the room. The Chair of the Exam does not replace the role of the Graduate School Representative in ensuring that the exam is administered in a fair and thorough manner.

At least six weeks prior to the exam, the student will prepare a Research Proposal in a format similar to the National Science Foundation Graduate Research Fellowship application. It is important that the proposal describe the conceptual background and broad significance of the proposed research, as well as the details of proposed experiments and data analysis. At least two weeks prior to the exam, the student will meet with each committee member to gather edits and suggestions to the proposal, in addition to allowing time for a final review of subject matter that may be reviewed at the General Exam. The student should submit a final draft of their Research Proposal no later than two days prior to their examination.

Format of the General Exam

| Exam Component | Persons Involved | Length of Time |
|---|--|--------------------------------|
| Introduction to exam structure | Chair of the Exam (faculty representative from GPPC) | 5 minutes |
| Presentation of research (results and plan) | Graduate student (questions <i>of clarification</i> from faculty are allowed) | 20 minutes |
| Questions from committee (round 1) | Round robin style from all faculty on committee, with questions that focus on research presentation (ideally 3-4 faculty members) | 10 minutes / faculty member |
| Break | - | 5 minutes |
| Questions from committee (round 2) | Round robin style from all faculty on committee (ideally 3-4 faculty members) | 5-10 minutes / faculty member |
| Preliminary decision | All faculty on committee (graduate student and Advisor step out) | 5-10 minutes |
| Final decision | All faculty on committee (grad student remains out of the room). Initial consensus is presented by the Chair of the Exam to the Advisor. | 5-10 minutes |
| Decision discussion | Graduate student and entire committee. Final decision is relayed to student by the Chair of the Exam. | 5-10 minutes |

A round-robin style question format will be implemented during General Exams to ensure that each faculty member receives an approximately equal amount of time to pose questions to the student. This will help ensure that both the breadth and depth of knowledge is explored during the exam. All members of the supervisory committee (including the Advisor and GSR) will be invited to present one or more questions during each round, however any faculty may elect to "pass" and not participate in that round's questioning. It is possible that the Advisor and/or the GSR may decide not to participate at all in these rounds of questioning—such a decision should be made clear to the student during the first one-on-one meetings preceding the exam. The student is encouraged to ask each committee member during these one-on-one meetings whether they will participate in questioning during the General Exam.

During the private full-committee discussion, the Advisor will provide any additional information deemed pertinent to the student's research or performance as a student. The Advisor will not be present during the preliminary decision conversation, but will hold an equal vote to other committee members in determining the final outcome of the exam.

The nature, scope, and content of the questions are entirely up to the Supervisory Committee, and the Supervisory Committee will provide guidance and context for potential questions during the preliminary meetings with students. It is expected the questioning will include such topics as:

- the context of the proposed research in the larger framework of science,
- the conceptual and historical basis of the proposed research within its discipline(s),
- the details of experimental design and analysis, and
- any additional topics discussed at the First Year Review Conversation.

As one of the outcomes of the General Exam is that students acknowledge the scope of their knowledge, it is anticipated that students will not be able to answer every question, and that questions outside of the student's immediate scope of research may be asked.

Possible Outcomes of the General Exam

Based on the vote of a majority of the Supervisory Committee members, the following are the only permitted outcomes for a General Examination:

| Exam Outcome | Evidence toward outcome |
|---|--|
| Candidate is recommended to proceed with | Student demonstrated competency in all of the |
| studies. | learning objectives of the General Exam. |
| The candidate must be reexamined after a period | Student demonstrated competency in most of |
| of further study. | the learning objectives of the General Exam. The |
| | supervisory committee requires further evidence |
| | of competency in 1-2 areas to ensure the student |
| | is prepared for independent research. |
| The candidate is not recommended for further | Student is unable to demonstrate competency in |
| study. | most or all of the learning objectives of the |
| | General Exam. |

Any member in the minority who wishes to dissent is invited to submit a written minority dissent report on the warrant for the exam, copies of which will be sent to the student, the Advisor, the Dean of the Graduate School, and the Graduate Program Manager, who will place a copy in the student's file.

In the event that the student is recommended for reexamination, it is anticipated that the reexamination should occur no later than one academic year quarter after the initial examination. The department allows one reexamination opportunity, unless specific permission for a second reexamination is granted by the Graduate Program Chair.

Graduate School policies and procedures governing the <u>General Exam</u> may be found at: (http://grad.uw.edu/policies-procedures/doctoral-degree-policies/general-examination-admission-to-candidacy-for-doctoral-degree/). These include requirements about the total number of credits (60) and graded 400- or 500-level credits (18) taken in residence prior to, or in the quarter of, the exam.

Teaching Assistantship Service

The purpose of teaching assistantship (TA) service is to:

- allow graduate students to develop professional teaching skills in preparation for potential careers in academia,
- contribute to the undergraduate teaching mission of the department, and
- provide financial support for graduate students.

Graduate students are expected to become comfortable with, and proficient at, teaching undergraduates at all levels from introductory courses (100-200) to mid-level core courses (300) to specialized upper-division courses (400). All graduate students are required to hold a regular TA appointment for two quarters while in residence. Every attempt should be made to gain TA experiences at all levels within the undergraduate curriculum.

While teaching assistantships are an integral part of the learning experience for students, they are also an important paid position in the department. Student employees are required to meet the expectations set forth in the position description for their class. Students' performance will be evaluated at the end of each quarter by the instructor of record and/or the course coordinator. If a student's performance is deemed unsatisfactory,

a conversation will be held with the Graduate Program Manager to discuss the situation and develop a plan of action for improvement. The student's Advisor and Graduate Program Chair will be notified of the evaluation and conversation results.

Should a student receive two unsatisfactory teaching assistant performance evaluations, the student will no longer be eligible for teaching assistantships through the standard assignment process. The student will need to work in conjunction with their advisor to secure funding for future quarters.

All teaching assignments are made under the guidance of the departmental Teaching Assistant Assignment Policy.

Academic Leave Policy

A student in good academic standing may request to go on academic leave for the purposes of:

- writing their dissertation
- an outstanding employment opportunity
- personal reasons, such as family/medical leave
- lack of available or appropriate funding opportunities

A student may request academic leave status via MyGrad Program (http://grad.uw.edu/for-students-and-post-docs/mygrad-program/). Once the request is received by the Graduate Program Manager, the Advisor will be contacted to verify that this leave has been discussed and approved by the Supervisory Committee. A student shall request no more than two consecutive academic year quarters (Autumn, Winter, Spring) of academic leave. Should more than two quarters of academic leave be necessary, the student must submit a written request to the Graduate Program Chair for approval. Please note that summer quarter is not considered an academic year quarter, and students automatically are considered on leave if they do not enroll for classes. Summer quarters on leave count toward total time-to-degree, but do not count toward total consecutive leave quarters for this specific policy.

The Doctoral Dissertation and Final Examination

The purposes of the doctoral dissertation and Final Examination are to:

- verify that the student has completed scholarly work of sufficient originality, depth, and breadth to merit a Ph.D. degree in Biology,
- provide the opportunity for the student to place their work in a larger scientific context, and
- improve the student's oral and written communication skills.

It is the student's responsibility to be aware of the formal structure, rules, and timelines for the <u>dissertation</u> (http://grad.uw.edu/for-students-and-post-docs/thesisdissertation/) and the <u>Final Exam (http://grad.uw.edu/policies-procedures/doctoral-degree-policies/final-examination-dissertation-defense/</u>). In addition to the Final Exam and dissertation requirements, eligibility for the PhD also requires:

- Passage of the General Exam, and all requirements prior to that milestone
- Completion of at least 27 dissertation credits (BIOL 800) over the course of three quarters

• Completion of at least 90 total credits

By the beginning of the quarter in which the student anticipates completion of the Ph.D. degree, the student will provide the Graduate Program Manager with the names of at least three members of the Supervisory Committee, including the Advisor, who have agreed to act as a Reading Committee for the doctoral dissertation. The Graduate Program Manager will transmit the request to the Dean of the Graduate School, who then will appoint the Reading Committee (http://grad.uw.edu/policies-procedures/doctoral-degree-policies/appointment-and-responsibilities-of-a-doctoral-reading-committee/). It is the responsibility of the Reading Committee to ensure that the dissertation is a significant contribution to knowledge and is an acceptable piece of scholarly writing, determine the appropriateness of a candidate's dissertation as a basis for issuing a warrant for a Final Examination, approve a candidate's dissertation, and sign the Doctoral Dissertation Reading Committee Approval Form that is placed within the dissertation after all revisions are completed (http://grad.uw.edu/wordpress/wp-content/uploads/phd-approval-form.pdf).

Once the Reading Committee is appointed, the student may request a Final Examination with the Graduate School by submitting a request via MyGrad Program
(http://grad.uw.edu/for-students-and-post-docs/mygrad-program/). To submit a request, the student must have a date, time, location, and defense title prepared to submit.

In order for the dissertation to be evaluated properly, the following timeline of events is recommended. The student should submit a final draft of their dissertation to their Reading Committee no later than six weeks prior to their defense date. Within two weeks of receiving the dissertation draft, the Reading Committee will evaluate the dissertation, confer, and determine whether the request for Final Examination may be approved. If so, the student will provide the remainder of the Supervisory Committee with the current or revised draft of the dissertation at least two weeks before the Final Examination. The student should expect to receive substantive responses no later than one week before the examination.

The student will receive the warrant for their Final Exam from the Graduate Program Manager via email one week prior to their exam date. The warrant must be printed and handed to the GSR prior to the beginning of the exam.

At least four members of the Supervisory Committee (including the Advisor, GSR, and two additional Biology faculty, one of which must have graduate faculty status) must be present at the Final Examination. The Final Exam usually is devoted to the subject of the dissertation and associated topics. The format of the exam is a public seminar (50 minute presentation, with an additional 10 minutes for questions from the audience), which covers the content of the dissertation. This is followed by a period of private questioning by the Supervisory Committee and other members of the graduate faculty. Total time for the Final Exam will not exceed three hours.

The department and Graduate School do allow for Supervisory Committee members to video conference into a dissertation defense if they are unable to be physically present in conjunction with Graduate School guidelines regarding <u>videoconferencing during doctoral examinations</u> (http://grad.uw.edu/policies-procedures/doctoral-degree-policies/instructions-for-video-conferencing-in-doctoral-examinations/. Should a connection be permanently lost with one of the four required Supervisory Committee members outline above, the Exam must end and be rescheduled.

Successful completion of the Final Exam will be determined by an affirmative vote from a majority of the members of the Supervisory Committee in attendance. The signed warrant must be returned to the Graduate Program Manager by the last day of the quarter. Any member in the minority is invited to submit a written minority dissent report, copies of which will be sent to the student, the Advisor, the Dean of the Graduate School, and the Graduate Program Manager, who will place a copy in the student's file.

In the event that the student does not successfully complete the Final Exam, the Supervisory Committee may, at the discretion of a majority of the members in attendance, request from the Graduate School one re-examination, to be given in a subsequent academic quarter.

The Reading Committee members may sign the Reading Committee Approval Form at the time of the Final Examination, provided that the dissertation is essentially complete. The Advisor should not sign the signature page until the dissertation is in its final form. Any member of the Reading Committee who so desires may refrain from signing until the dissertation is complete. The signed form is uploaded to the ETD site with the final dissertation. Further information about the submission of the dissertation can be found on the Graduate School's Thesis/Dissertation website (http://grad.uw.edu/for-students-and-post-docs/thesisdissertation/). No more than one quarter may pass between the successful completion of the Final Exam and the submission of the dissertation to the Graduate School.

Requirements for the Master of Science degree in Biology

To receive a Master of Science (MS) in Biology, the in addition to the <u>Graduate School Master's Degree Requirements</u> (http://grad.uw.edu/policies-procedures/masters-degree-policies/masters-degree-requirements/), the following conditions must be met:

- 1. The Supervisory Committee is appointed, and is in agreement that the student should exit the program with a MS degree.
- 2. The student has passed their General Examination OR will submit a <u>masters thesis</u> (http://grad.uw.edu/for-students-and-post-docs/thesisdissertation/).

Exceptions to the above standards must be approved by the Graduate Program Chair and/or Graduate School.

Department of Biology does not issue Master of Science (MS) degrees during the standard course of study in the PhD program. However, unusual circumstances may warrant consideration for this request. Should this request arise, the student should work with their Supervisory Committee and the Graduate Program Chair to authorize this exception.

Evaluating Student Progress

Criteria for evaluation: The following criteria will be used to determine whether progress towards the advanced degree is satisfactory:

- cumulative and quarterly GPAs computed on those courses taken while the student is enrolled in the University of Washington Graduate School,
- fulfillment of degree program requirements,
- performance during informal coursework and seminars,
- professional and ethical conduct of research, and
- research capability, progress, and achievements.

Responsibility for, and timing of, determination of student progress: The members of the Supervisory Committee and the departmental graduate faculty as a whole are charged with determining whether or not the student is making satisfactory progress towards the advanced degree. Progress will be evaluated at the student's annual meeting of the Supervisory Committee, at faculty meetings devoted to a review of graduate student progress, and at any other times deemed necessary by the Advisor or the Graduate Program Chair. If a majority of the committee members, or a majority of the graduate faculty in the department, find that the student's progress is unsatisfactory, procedures will be followed as detailed in Graduate School Memo 16: Unsatisfactory Performance and Progress (http://grad.uw.edu/policies-procedures/graduate-school-memoranda/memo-16-unsatisfactory-performance-and-progress/).

For students who have not yet selected a Supervisory Committee, the temporary advisor and the faculty members of the GPPC will serve as a Temporary Supervisory Committee for purposes of determining progress towards the advanced degree.

It is generally expected that a student in good standing will complete the degree requirements within five years of continuous study. Upon the end of a student's fifth year of study, the Graduate Program Chair may contact the Advisor to provide additional support and structure to the student and/or Supervisory Committee to support the student's completion of the degree program.

Per <u>Graduate School guidelines</u>, students are expected to complete their PhD degree within 10 years (inclusive of leave time) of matriculation (http://grad.uw.edu/policies-procedures/doctoral-degree-policies/doctoral-degree-requirements/).

Recommendation of action: The Supervisory Committee or departmental graduate faculty as a whole will determine, by majority vote of a quorum of faculty, what action is to be recommended as a consequence of the student's unsatisfactory progress (see below for a list of possible actions). This recommendation must be communicated, in writing, from the Advisor or the Graduate Program Chair within one week of the committee or faculty meeting. The Graduate Program Chair will then make a recommendation to the Dean of the Graduate School, and will notify the student in writing of this recommendation.

Restoring the student to good standing: The Supervisory Committee or the departmental graduate faculty as a whole will determine, by majority vote of a quorum of faculty, what tasks the student must complete in order to restore good academic standing, and will set deadlines for the completion of these tasks. It is expected that the assigned tasks will be developed in a collegial discussion among the committee members and the student, with the goal of helping the student formulate a clear plan for progress towards completion of the advanced degree. The assigned tasks will be detailed in the letter from the Advisor or the Graduate Program Chair to the student, with a copy sent to the Graduate Program Manager for placement in the student's file.

Actions that may be recommended by the Supervisory Committee, the departmental graduate faculty as a whole, and the Graduate Program Chair in cases of unsatisfactory progress include:

No Action

May be recommended for those students whose cumulative GPA is above 3.0 but whose most recent quarter's work is below 3.0, if the review has determined that this condition is not cause for immediate concern.

Warn

May be recommended for those students whose cumulative GPA has dropped slightly below 3.0, OR may be recommended for those students who have failed to meet expectations for performance and progress as determined by the Biology Graduate Student Guidelines, prior Supervisory Committee meetings, or other criteria explicitly stated and documented by the Supervisory Committee and/or GPPC.

Warn status will be in place for one quarter. A Warn Memo will be generated that states the deficiencies identified, what must be done to correct them, and the timeline for correction. Warn status is not entered onto a student's transcript.

The Supervisory Committee or graduate faculty as a whole will meet to review the student's progress in the academic quarter following a recommendation of "warn".

Probation

May be recommended for those students who have not corrected the deficiency that caused the Warn action within the time limit specified by the Warn Memo, OR may be recommended for those students who suddenly and substantially depart from scholarly achievement as defined by the Supervisory Committee or GPPC. A previous Warn recommendation is not necessary.

Probation status will be for one quarter. A Probation Memo will be generated that states the deficiencies identified, what must be done to correct them, and the timeline for correction. Probation status is entered onto a student's transcript.

The Supervisory Committee or the graduate faculty as a whole will meet to review the student's progress in the academic quarter following a recommendation of "probation".

The Department may, at the discretion of the Chair, not award a TA position to a student who is currently on Probation or has been on Probation status within the past two quarters.

Final Probation

May be recommended for those students who have not corrected the condition(s) that caused the Probation recommendation within the time limit specified by the Probation Memo, OR may be recommended for those students who fail to progress toward completion of the graduate program.

Final Probation status will be for one quarter. A Final Probation Memo will be generated that states the deficiencies identified, what must be done to correct them, and the timeline for correction. Final Probation status is entered onto a student's transcript.

The Supervisory Committee or the graduate faculty as a whole will meet to review the student's progress at the beginning of the quarter (including summer quarter) following a recommendation of "final probation", and will recommend student status for the following quarter, including remaining on Final Probation (no more than two consecutive quarters), Probation, or Drop.

The Department may, at the discretion of the Chair, not award a TA position to a student who is on, or has been on, Final Probation status within the past two quarters.

Drop

Final action to be recommended. A Drop recommendation means immediate drop from the University of Washington. This recommendation must be submitted by the Graduate

Program Chair to the Graduate School soon after the beginning of the quarter following the quarter on which the decision is based. Should a Drop recommendation be submitted, the student will receive a Drop Memo that outlines the rational for this action.

Appeals: If the student believes that the Graduate Program Chair's recommendation to the Dean of the Graduate School is unjustified, or if the student feels that one or more of the assigned tasks to restore good academic standing are inappropriate, the student should appeal these decisions to the Chair of the Department. Appeals beyond this point should follow the process outlined in Graduate School Memo 33: Academic Grievance Procedure (http://grad.uw.edu/policies-procedures/graduate-school-memoranda/memo-33-academic-grievance-procedure/).

Resolving conflicts between students and advisors

Though conflicts between students and their advisors are uncommon, the department takes them seriously due to the inherent power asymmetry between a student and a faculty member. When a conflict is identified, it is recommended that the student and/or advisor make a good faith effort to address the concern directly with the party of concern. If this type of conversation is not possible or the situation is not resolved as a result of the conversation, it is recommended that the student and/or advisor reach out to one or more of the following parties for assistance:

- Supervisory Committee and/or Graduate School Representative: These faculty will be most familiar with the student's research and progress, and with the relationship between the student and advisor.
- Graduate Program Manager/Graduate Program Chair: The Graduate Program Manager and Chair hold the role of advocating for the concerns of graduate students. Consultations with either of these parties may be helpful to learn options or resources available, paths forward, or discuss how to have difficult conversations with the concerned parties. Conversations with either of these individuals remain private.
- **Department Administrator/Department Chair:** The Department Administrator serves as the local human resources expert, and most departmental decision-making processes ultimately reside with the Chair. These individuals are most appropriate to reach out for consultation if prior parties did not provide resolution, or if one of the prior parties is the party of concern.

Should the situation not be able to be resolved within the department, or the student is uncomfortable approaching the issue with members of the department, other campus resources may be used, such as:

- Graduate School Memo 33: Academic Grievance Procedure (http://grad.uw.edu/policies-procedures/graduate-school-memoranda/memo-33-academic-grievance-procedure/).
- University Office of the Ombud (https://www.washington.edu/ombud/).
- University Complaint Investigation and Resolution Office (UCIRO) (https://compliance.uw.edu/UCIRO/officeinfo).
- UAW Union (http://www.uaw4121.org/).

Other campus resources that may be of use can be found in the departmental Conflict and Complaint Resolution Process policy.