

GOVERNING DOCUMENT FOR STUDY TOWARD THE DOCTOR OF PHILOSOPHY DEGREE
DEPARTMENT OF BIOLOGICAL SCIENCES, BOWLING GREEN STATE UNIVERSITY

The following rules and guidelines are supplementary to those of the Graduate College and are subject to change (but not retroactively) at any time by the Graduate Faculty of the department. The right to petition to the departmental Graduate Committee for waiver from the provisions of these rules is specifically guaranteed to any student and that student's advisor.

I. ADMISSION TO DOCTORAL PROGRAM

A formal application must be submitted by a person seeking admission to the doctoral program. The application must be supported by copies of transcripts, GRE (verbal, quantitative, analytical) scores, and three letters of recommendation. A student can enter the Ph.D. program in a number of different ways: (A) directly upon completion of the B.S./ B.A. if criteria specified below are met; (B) upon completion of a masters degree from BGSU or other institution; or (C) by switching from the BGSU M.S. program to the Ph.D. program.

- A. A student may go directly from the BS to the Ph.D. if the following entry credentials are presented and approved by the Graduate Committee:
1. GPA of 3.3 overall and 3.3 in biology, and GRE scores in at least the 60th percentile on average in all categories.
 2. Strong letters of recommendation, and proof of research potential. Research potential can be demonstrated by:
 - a. Research paper published or accepted for publication in a refereed journal, or
 - b. Success at receiving funding support from extramural sources, or
 - c. Other evidence of research aptitude.
- B. Separate application to the Ph.D. program must be made for students completing a master's degree, even if the degree is from BGSU. If the applicant is a master's degree candidate at this institution and wishes to be considered for admission prior to completion of the thesis defense, the application materials must include letters of recommendation from the thesis major advisor, the thesis committee members, and a faculty member willing to serve as advisor for the Ph.D.
- C. Within three semesters of entering the Department of Biological Sciences master's degree program at BGSU, a student may apply for entry into the Ph.D. program without completing the M.S. degree requirements. The student's record should satisfy the requirements established for the B.S. to Ph.D. track (item A, above), or the equivalent. The student's committee in consultation with the Graduate Committee will evaluate the candidate's undergraduate and graduate records and make a decision based on that record.

II. GENERAL REQUIREMENTS AND PROCEDURES FOR THE PROGRAM

A. Academic requirements

The total hour requirement for the degree is either 90 hours of graduate credit post-B.S. or 60 hours of graduate credit post-masters.

For BS to Ph.D. students:

Course and Credit-hour requirement

- 90 credit hour total
- 30 credit hour Biol 7990, dissertation research (once started continuous registration, except non-credit hour summers, until degree is completed)
- 60 credit hours of coursework (should be finished before preliminary examination and if not then by the end of third calendar year).
 - At least 10 credit hours of formal courses, including Biol 6820 (i.e., lecture/exam/letter-graded format)
 - No more than 22 credit hours at 5000 level
 - At least 38 credit hours at 6000 level or above.
- Specific coursework to be finished by end of first year
 - Biol 7810, Department Seminar (at least one credit hour)
 - Deficiencies in calculus/organic chemistry with lab.
- Specific coursework to be finished by end of second year
 - Biol 6820, Grant Writing
- Courses that do not count towards degree: Biol 5870, Biol 6910, Biol 6990, classes to fulfill ESL requirements, chemistry or calculus taken to fulfill deficiency

For M.S to PhD students:

- 16-30 credit hours total
- 30 credit hours Biol 7990, dissertation research (once started continuous registration, except non-credit hour summers, until degree is completed)
- 30 credit hours of course work (should be finished before preliminary examination or, at the latest, by end of third year).
 - At least 10 credit hours of formal courses, including Biol 6820 (i.e., lecture/exam/letter-graded format)
 - No more than 10 hours at 5000 level
 - At least 20 credit hours at 6000 level or above.
- Specific coursework to be finished by end of first year
 - Biol 7810, Department Seminar (at least one credit hour)
 - Deficiencies in calculus/organic chemistry with lab.
- Specific coursework to be finished by end of second year
 - Biol 6820, Grant Writing
- Courses that do not count towards degree Biol: 5870, Biol 6910, Biol 6990, classes to fulfill ESL requirements, chemistry or calculus taken to fulfill deficiency.

GPA: It is necessary to maintain a grade point average of 3.2 at all times (failure to do so will result in probation for a semester. If a 3.2 is subsequently not attained your admission in the program will be terminated).

TDP: The tentative degree program (TDP), approved by the major advisor and the student's Committee, must be approved by the departmental Graduate Advisor by the end of the first academic year (chair of the Graduate Committee) who may seek the advice of the Graduate Committee when appropriate.

B. Doctoral Committee

1. The advisor in consultation with the student will submit to the departmental Graduate Committee the names of at least three additional graduate faculty willing to serve with the advisor as the student's Doctoral Committee (Research Prospectus Form). At least 3 members of the committee must be regular graduate faculty in the Department of Biological Sciences. This committee should be constituted by the end of the second semester of the first year after the student has been admitted to the doctoral program. [Consult "Policy Concerning Utilization of Non-contract Personnel on Graduate Committees" approved by Graduate Faculty October 20, 1976.] Prior to the Preliminary exam the Graduate College will appoint an outside member to the committee when requested using the Preliminary Exam Application Form.
2. The functions of the Doctoral Committee are:
 - a. To consult formally with the advisor and the student to formulate a program of study for the student.
 - b. To make an annual review of the student's progress and to certify his/her progress, as either satisfactory or unsatisfactory, to the departmental Graduate Committee.
 - c. To conduct a Research Prospectus meeting, Preliminary exam, Proposal Meeting and a Dissertation Defense. The membership of the committee need not be the same for each of these exams.
3. The Committee should be considered as an important advisory and examining body, but the graduate student's advisor must be permitted considerable latitude in planning the student's program.
4. After a committee has been formed and by the end of the first year/beginning of second year the student should hold a Research Prospectus Meeting. This meeting will be with the doctoral committee and will be an informal overview of the student's proposed research (to be held six months before the preliminary examination). The completed Research Prospectus form should be submitted to the Graduate Coordinator.

C. The Preliminary Examination

1. The preliminary examination may be scheduled as soon as the student has completed the requirements of the department and Graduate College, but no later than the end of the second calendar year.

The Examining Committee will be formed and the advisor will file a request with the dean of the Graduate College to hold the preliminary examination at least four weeks prior to the date of the examination. At that time a

representative of the Graduate College will be appointed to the Examining Committee by the dean.

The student's advisor shall serve as the chair of the Examining Committee. The preliminary examination shall consist of a written and an oral portion.

2. The written portion of the preliminary examination will be administered first. All members of the Examining Committee will submit questions to the student's advisor in a sealed envelope prior to the start of the written portion of the exam. Exam questions should be limited to areas related to and/or supportive of the student's research. The student may select questions from the examiners in any order. However, only one sealed envelope will be given to the student at a time. The student is expected to answer all questions required by one examiner before securing the next sealed envelope. Normally, one week shall be considered sufficient time to complete the entire written portion of the examination. The student may not have access to reference material, unless deemed essential and supplied by the examiner. The exam will be supervised by the student's advisor. The advisor will return the answers to the examiner for evaluation as soon as the student has completed those questions.

Each examiner will report his/her evaluation of the written section of the examination to the advisor as soon as practical.

3. The oral portion of the preliminary examination should not be scheduled if the written portion of the examination is judged unsatisfactory by the majority of the Examining Committee. The oral portion of the examination will be scheduled the week following the written portion. The oral examination may not be adjourned except in extenuating circumstances, e.g., illness of the student or an examiner. The oral portion of the examination normally will be completed within two hours but may be longer at the discretion of the committee. Attendance of all committee members, including the Graduate College Representative, is required at the examination.
4. The Examining Committee must make a decision of pass or fail after the preliminary examination has been completed. The preliminary examination will be considered to be passed when the Examining Committee evaluates the written and oral examinations as satisfactory. No more than one dissenting vote is allowed to pass the examination. In case of failure of either section of the preliminary examination (written or oral) a second examination may be taken after six months have passed. The student shall be advised concerning the areas of the examination which were deficient in order to increase competence in the appropriate areas. Failure of a second examination removes the student from the doctoral program.
5. The examining committee must report the results of the preliminary examination to the departmental Graduate Committee and to the Graduate College on the Preliminary Examination Form.

D. The Proposal Meeting

The student will prepare a proposal document (focused on the proposed course of research) which will serve as the basis of a meeting of the student with his or her committee. The proposal should be supported by previous or preliminary data, either from the student's M.S. work or from the first years of study in the Ph.D. program at BGSU. The Proposal Meeting should occur no more than six months after the preliminary examination and include all committee members, including the Graduate College Representative. The Topic Approval form with all appropriate signatures should be completed and submitted to the Graduate College.

Topic Approval.

Approval of the research proposal (i.e., Topic Approval) implies both acceptance of the written document and satisfactory performance by the student in the Proposal Meeting itself. For students on the B.S. to Ph.D. track, approval of the proposal allows the student to officially begin the Ph.D. part of the program (and receive Ph.D. level funding, if funding is awarded). If the research proposal is not approved, the student may repeat the Proposal Meeting after six months have passed. For students on the B.S. to Ph.D. track, if the proposal is still not acceptable after the second meeting, The student will be allowed to enter and attempt completion of all requirements of either the plan I or plan II master's degree program.

E. Dissertation Research

1. Topic Approval

See section D (Proposal Meeting). Topic approval should be completed within 6 months following successful completion of the Preliminary Exam.

2. Dissertation

The dissertation is to be a mature and scholarly piece of writing, embodying the results of significant research by the candidate in a specialized area. The dissertation will show evidence that the candidate has mastered the literature in his/her area of specialty and has analyzed and assimilated the candidate's research results into that body of literature. The dissertation will follow the format prescribed by the Graduate College and will be written to conform to the most recent edition of the Conference of Biological Editors Style Manual for Biological Journals, or the editorial style of a specified biological journal approved by the advisor.

The dissertation research is expected to be a publishable contribution to the research literature; students are expected to attempt publication of their research prior to graduation. Accordingly, published, in-press, or submitted articles in refereed journals may be submitted as part of a dissertation with the student's advisor's approval.

F. Final Oral Examination (Dissertation Defense)

1. Every candidate for the Ph.D. degree must pass a final oral examination administered by his/her Doctoral (dissertation) Committee plus the representative of the Graduate College. The student, with the approval of his/her advisor, will submit a final draft copy of the dissertation manuscript to the doctoral (dissertation) committee at least two weeks before the date set for the final oral examination. The place and time of the oral exam must be announced to department faculty at least one week prior to the exam. The final oral will consist of a defense of the dissertation and may cover related fields of study.
2. The Doctoral (dissertation) Committee must render a pass or fail decision after completion of the final oral examination. No more than one dissenting vote is allowed for a student to pass the examination. The Doctoral Committee shall report the results of the final oral examination to the departmental Graduate Committee and to the Graduate College using the ETD Approval/Submission Form.
3. If the final oral is judged unsatisfactory (failure), the candidate may take a second examination upon the recommendation of his/her dissertation committee and with the approval of the dean of the Graduate College four months or more after the date of the first examination.
4. No candidate will be permitted to take the final examination more than twice.

G. Exit Interview

During the last semester of attendance all students must submit a completed Exit Interview Form, a current CV, and a forwarding address, to the Graduate Coordinator.

III. TIME LIMITATIONS

1. The time limit to complete all degree requirements for doctoral students is eight years from the end of the earliest course used to fulfill degree requirements on the tentative degree program.
2. Funded Ph.D. students should expect continued funding for four years if they are in good standing and follow the degree timeline (see checklist for Ph.D. program). Support for the 5th year is not a certainty and needs to be requested from the Graduate Coordinator with supporting letters from both the graduate student and his/her advisor. Students should not expect support beyond the 5th year.