Comparative Health Sciences GRADUATE PROGRAM GUIDELINES

for general information consult the **Graduate School**

Doctor of Philosophy (PhD) Program

see flowchart for successful PhD completion

Thesis Committee Program Meeting

The <u>Ph.D. Graduate Committee</u> consists of 5 members of the OSU graduate faculty. A Graduate Council Representative is included to serve as advocate for appropriate process. A Program Meeting will be held no later than the end of the first year of graduate enrollment. The Program Meeting will cover two aspects: the proposed coursework (Program of Study) and the proposed research (Thesis Outline). This meeting will include all members of the committee. A <u>Program of Study form</u> should be completed during the meeting.

Program of Study (108 graduate credits required, i.e., 500 or 600 level):

- At least 36 coursework credits consisting of:
 - a. The required core courses that must be taken during Year 1
 - **b**. The remaining should be relevant to the thesis research and must be agreed to by the thesis committee.
- At least 36 Thesis credits
- Sufficient additional Thesis credits to reach 108 total credits.

Note: 54 of the 108 credits must be graduate stand-alone courses (500 or 600 level) that are not derived from the 500 component of 400/500 slash courses.

Note: Full time enrollment is 12 credits per term in the academic year and 9 in the summer. Maximum load permitted is 16 credits.

Thesis Outline

Students must prepare and submit to their committee an outline of the thesis project. This outline must be sufficiently detailed to enable the committee to evaluate the progress of the student on a yearly basis.

Annual Meeting Requirements

Students are required to meet yearly with their Graduate Committee to evaluate their progress. The <u>Annual Graduate Student Progress Report Form</u> must be completed by the student and major professor and returned to the assistant to the program.

Other Requirements

- Students must maintain an overall GPA of 3.0 and will be notified by the Graduate School
 if their GPA falls below 3.0 for any term. The cumulative GPA must be at or above 3.0
 before the final exam can be taken. Grades at or below C (= 2.0) cannot be used as
 graduate credit.
- 2. Candidates must complete one term of service as a Graduate Teaching Assistant before graduation. This is considered a valuable experience and an integral part of training towards a higher degree.
- 3. Candidates must present two public presentations of their research in a national/international meeting/conference.

Preliminary Qualifying Examination

As outlined by the <u>Graduate School</u>, to be admitted for the doctoral degree, students must pass a comprehensive Preliminary Examination conducted by the Graduate Committee. The purpose of this exam is to determine the student's understanding of their major and minor fields and to assess their capability for research. It involves a written research proposal on a topic that is or not from the student's thesis research, followed by an oral examination that features a presentation and then questions on the proposal topic. There will also be questions on more general topics drawn from the student's coursework and/or general area of thesis research. The Preliminary Examination is best taken after about two years, near the completion of the coursework on the Program of Study.

Scheduling the Preliminary Exam

The committee is contacted for:

- (1) Agreement on the research proposal topic
- (2) Setting the target date for completion of the written proposal

- (3) Acceptance of written proposal
- (4) Arrangement of a date, time, and place for the exam

Written Proposal

Students must write a proposal on an approved topic.

- To select a topic, the student will provide the committee with up to 3 titles and brief summaries of each.
- The topic may be on anything including a topic close to the student's thesis project and is at the discretion of the student's committee.
- The committee must approve the topic with no more than 1 dissenting vote (email votes are acceptable).

Unless otherwise specified by the committee, the proposal shall be based on the format of an NSF postdoctoral proposal. The format and length should be discussed with the committee; a general guideline follows.

- The length shall be 5-7 pages (single-spaced, not including references).
- The proposal should include the following sections:

Specific aims

Background and Significance

Research Design and Methods

Literature cited (not included in the page limit)

• Within these sections, the committee will be looking for the following components:

Clearly stated research problem

Clearly developed, testable hypothesis

Focused experimental aims

Contingency plans for aims/objectives

Appropriate experimental design

Appropriate data analysis methods

Justification for, and impact of, the proposed research

A realistic project timeline

The proposal should be submitted to the committee within the specified period after the committee has approved the topic (typically 4-6 weeks). The individual committee members must review the proposal and determine if the written proposal is acceptable for an oral exam defense. This review should take place within 1 week of submission.

- In the event revisions are required (i.e., the proposal is judged as being insufficiently developed to proceed with the oral exam), the student will have 4 weeks to modify and resubmit the proposal to the committee for a second decision.
- The student must schedule the oral exam within one week of the decision to accept the proposal.

Oral Examination

The exam is scheduled with the Graduate School using the **Exam Scheduling Form**.

- The oral exam must be at least 2 hours in length and is typically up to 3 hours long. The oral exam covering the thesis proposal should constitute about half of the exam time.
- All members of the graduate committee should be physically present at the required graduate exam (for exceptions, see <u>Remote Participation</u> requirements).
- The defense of the proposal should include a presentation of the proposal by the student (30 minutes), followed by questions from the committee members that are answered by the student.
- Approximately half of the exam will be devoted to open questions
 - (a) The open questions may include anything related to science or the training of the student that the committee members deem relevant.
 - (b) It is recommended that the candidate practice answering questions with their advisor, committee members and/or other students.
- The decision to pass the individual is subject to the rules of the Graduate School, which
 gives the committee the options (i) to pass, (ii) not to pass and to terminate the student's
 work, (iii) not to pass and to allow a re-examination, or (iv) to recess and re-convene
 within two weeks.
- A copy of the scoring sheet needs to be returned to the office of Comparative Health Sciences.

Final Oral Examination

The examination committee will consist of the same members as for the Preliminary Examination, although substitutions may be made if approved by the Program and the Graduate School. The student must contact members of the committee to arrange the date, time and place, then schedule the exam with the Graduate School not less than two weeks before the examination. One copy of the pre-text pages of the thesis must be submitted to the Graduate School when scheduling the exam. Examination copies must be distributed to all committee members two weeks prior to the examination. All members of the graduate committee should be physically present at all required graduate exam (for exceptions, see the Remote Participation requirements).

The first part of the exam is the thesis presentation portion, which is open to all interested parties. After the thesis seminar, the committee and student will continue in closed session to examine the thesis and its broader relationship to microbiology.

• The decision on the outcome of the exam will be based on a <u>Scoring Guide</u>/Rubric Sheet provided by the student and the major professor for the Ph.D. thesis defense. After the major professor explains how the guide will be used, each graduate committee member will be asked to use the form in documenting their assessment of the student. At the conclusion of the exam the committee will discuss the student's performance (per the Scoring Guide). The major professor will collect the completed forms for filing in the Microbiology Office.