

## **Anatomy and Structural Biology Program**

### **Ph.D. Qualifying Exam Procedure**

**All the students pursuing the Ph.D. degree are required to pass the qualifying exam to continue their Ph.D. work.**

#### **The objective of the qualifying exam**

To examine the student's foundation in Anatomy and Structural Biology that will enable him or her to carry out research in a chosen field of study.

A student is expected to have an adequate breadth and depth of knowledge in the wider areas of Anatomy and Structural Biology to merit advancement to candidacy for a Doctorate in Philosophy.

#### **Format of the Exam**

The qualifying exam consists of a critical literature review in the assigned topic with critical analysis of the literature and directions for future research in the area, written examination related to the paper submitted, and an oral defense of the paper.

The paper must be prepared and written by the candidate himself/herself. The writing of a paper must be 20-30 pages (1.5-spaced) in length, excluding abstract, figures, and references (see detail in guideline for QE written report preparation). For written examination and oral defense, the exam committee members will ask questions about the review theme and other topics related to the student's basic knowledge in the coursework.

#### **Request for Qualifying Exam**

To register for the Ph.D. qualifying exam, a student must submit a completed application form to the program officer. The application form includes the name of the student's advisor, academic background, current thesis topic, classes taken to date and grades (transcript), TOEFL or IELTS score and a one-page abstract of the thesis research.

The student must present, to the exam committee, 3 topics of interest that may be related to the thesis research but not directly relevant to the thesis proposal. One paragraph abstract of each topic must also be provided.

#### **Qualifying Exam Committee**

The program chair appoints the student to draw four faculty program members as the qualifying exam committee. One of whom will be selected as a chair of the committee. The student's research advisor must not be included in the committee.

#### **Selection of the Topic**

A student must present 3 topics of interest and abstract of each topic to the qualifying exam committee. The proper topic will be chosen by the qualifying exam committee.

### **Arrangement of the examination**

It is the student's responsibility to arrange for the written and oral examination dates with the committee and to arrange for the room with the officer. The student must complete the literature review paper within 4 weeks from the time the topic is chosen by the committee. A file of the written report in word format (.doc or .docx) must also be given to the committee chair for plagiarism checking. The committee will have two weeks to evaluate the written document and provide questions related to the written document as a written exam by the end of week 6 from the beginning. After the written exam, the student will have two weeks for the oral defense preparation of the qualifying exam. Oral defense should not exceed an hour of the presentation.

### **Exam Schedule**

Student must attempt the exam before the end of the fifth semester of the graduate study. If the exam result is "Fail", the exam may be re-taken once by the end of the seventh semester.

A student who has not passed the qualifying exam by the end of the seventh semester, the graduate school will judge as "not making satisfactory progress" toward the Ph.D. degree.

### **Evaluation of the Exam**

The qualifying exam committees decide whether the student has passed or failed according to the qualifying exam evaluation rubrics.

A minimum of 3.5 is required to pass the written report of the qualifying exam.

A minimum of 70 % is required to pass the written exam of the qualifying exam.

A minimum of 3.5 is required to pass the oral defense of the qualifying exam.

The decision will take place after the oral defense in the absence of the student.

An evaluation will be based on the major areas: knowledge of concepts, creativity & critical thinking skills, and oral (communication) skills. The committee will evaluate each student and write their comments on evaluations form according to the rubrics set by the faculty program member and return it to the chair committee. The student will be given the result and feedback /recommendation summary after the exam by the chair of the committee. The chair committee has to write overall results in QUALIFYING EXAMINATION EVALUATION form and send to the Program chair right after the oral defense.

### **Possible Results**

On the basis of the written report, written examination, and the student's performance in the oral examination, the committee will decide upon one of the following four outcomes:

a) Pass;

b) Pass with conditions;

In this case, the committee will outline the weakness and how the conditions the student could (or must) fulfill before reconsideration. The student will be assigned some candidacy paperwork and have 2 weeks to fulfill with the conditions. After the conditions have been fulfilled, the committee will reconsider the result from "Pass with conditions" to "Pass".

c) Fail with re-examination. (Be appropriate when the committee believe that the student's performance will be improved if the student is aware of his/her weak points and tries the best in the re-examination). For a re-examination, student has to do the process as a new submission for QE examination in a year, topic may be the same or different from the first one (under a consideration of the committee).

d) Fail. (Be appropriate when the committee make decision that the student's overall performance in the examination indicates that he/she does not have strong prospects of successfully completing the Ph.D.).

In the case of "FAIL", student is not permitted to continue in the Ph.D. program. Such a student can be allowed to continue to study for a M.Sc. degree.

## Time line for Ph.D. Qualifying Examination

**: QE examination must be set up in the fifth semester of the graduate study**

0	<ul style="list-style-type: none"> <li>☆ Submit QE application form</li> <li>☆ Topic is approved by the committees.</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>☆ Submit written paper</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>☆ Committee meeting: Evaluation of the written paper</li> <li style="padding-left: 20px;">: Set up the written examination questions. (2 questions/committee,20 points each)</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>☆ Written examination (6 hours limit)</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>☆ Committee meeting: Result of the written exam</li> </ul>
Week 8	<ul style="list-style-type: none"> <li>☆ Oral defense</li> <li style="padding-left: 20px;">: Result of QE announcement</li> </ul>

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Week 10 ☆ If pass with condition is applied, student must complete the conditions by the end of week 10.

**Remark:** If fail with re-exam is applied, student must complete the QE re-exam in a year.