

Guidelines for MCB Qualifying Exam

The purposes of this document are 1) to provide information that will prepare students for what to expect in the qualifying exam, and 2) to provide guidance for advisory committees on format of the MCB qualifying exam. Individual advisory committees may choose to modify the details of this format, but these changes should be clearly conveyed to the student well in advance of the exam.

The MCB qualifying exam has two components, written and an oral.

Written Components:

1) The written exam The written exam is comprised of written questions from each member of the student's core Ph.D. advisory committee (four members as of May 2001). The questions are submitted by advisory committee members to the student's academic advisor a week in advance of the exam date. The question should state whether it is an "open book" or "closed book" question. If necessary, the academic advisor will communicate with advisory committee members to clarify the scope and topic of the exam questions. The academic advisor is responsible for administering the exam (arranging for a desk for "closed book" questions, explaining the question to the student,...). The student is given no more than one work day (~ 8 hours) to answer each question. The examiner may specify a time limit if he/she wishes. Each advisory committee member has primary responsibility for grading his/her own question as either pass or fail. The student must pass a majority (usually 3 out of 4) exam questions in order to go forward with the oral exam. If the student does not pass three questions, the advisory committee may make one of the following recommendations:

- 1) Recommend that the student answer one new written question for each question failed. If the student passes a total of three questions (including the number passed from the original four questions), the student automatically goes forward with the oral exam. If the student does not pass a majority of questions after repeating failed questions once, one of the options below should be selected.
- 2) Recommend that the student retake the entire exam from the beginning at a later date (typically for students requiring more than one additional pass after the first set of written answers).
- 3) Recommend that the student transfer from the Ph.D. to the M.S.A or M.S.B program.
- 4) Recommend that the student be terminated from the Biology Graduate Program. Termination will proceed according to the policies described in the Rules, Regulations, and Policies of the Biology Graduate Program.

2) The research proposal The research proposal will conform to the NIH Individual National Research Service Award Fellowship application form (PHS 416-1). Instructions and forms for PHS 416-1 can be found at [Individual National Research Service Award Application PHS 416-1](#). The proposal's topic should be the student's proposed Ph.D. research. The major professor may discuss the proposal with the student and make general editorial comments on drafts of the document, however; the student must write the scientific components of the proposal and be able to defend what is written. The student must deliver a written copy of the proposal to each advisory committee member. The advisory committee either accepts or rejects the research proposal as sufficient for the purpose of the qualifying exam. If the proposal is rejected, the advisory committee must make one of the following recommendations:

- 1) Recommend that the student submit an improved proposal for re-evaluation.
- 2) Recommend that the student transfer from the Ph.D. to the M.S.A or M.S.B program.
- 3) Recommend that the student be terminated from the BGP. Termination will proceed according to the policies described in the Rules, Regulations, and Policies of the Biology Graduate Program.

Oral Component

The Oral Exam. The oral exam is just that; an oral examination by the Advisory Committee covering any topic that they deem relevant. Questions are intended to provide a comprehensive assessment of the breadth and depth of the student's knowledge. They typically are derived from the reading or discussion of the research proposal, but may also include topics related to material from the written exam or from coursework. The point of the oral exam is to determine not only what the student knows, but also how well the student can think through and arrive at the answers she/he does not know.

Order of events:

Students should prepare the research proposal first. If the proposal is deemed sufficient for the purpose of the qualifying examination (that is, it need not be fundable, just clearly written and useful for generating questions), then the committee generates questions for the written exam based either on the proposal or on an area appropriate for both the committee member and the student. The written exam is then conducted, and if the committee sees fit, the oral exam can be scheduled as early as two weeks after the student passes the written exam.

Time-table for the MCB Qualifying Exam

During the student's fourth semester:

The student should hold a meeting of his/her Advisory Committee to determine whether it is appropriate to plan for the Qualifying Exam. The student's academic record and performance in the lab will be considered as part of the decision process. A tentative date for the qualifying exam should be chosen in accordance with the time table (see below) and the committee should choose whether to adopt the guidelines of this document or to make modifications. Any changes should be made clear to the student. The student then writes the research proposal with guidance and editorial help from the major professor. This process can begin as soon as the major professor feels that the student is ready, but it should begin no later than the student's fourth semester or second summer in the Biology Graduate Program. The student should give each advisory committee member a hard-copy of the proposal **at least six weeks before the proposed oral exam date.** The committee has one week to evaluate the proposal.

The advisory committee has one week to either accept or reject the research proposal as sufficient for the purpose of the qualifying exam (see above). If the proposal is accepted, then members of the advisory committee will submit written questions to the student's major professor **by the end of the following week (five weeks before orals).**

Four weeks before the oral exam date:

The student takes the written exam.

Three weeks before the oral exam date:

The committee grades the written exam.

Two weeks before the oral exam date:

The oral exam date, time, and location are scheduled with the Graduate School through the BGP office. *This is a hard deadline from the Graduate School and cannot be by-passed by the committee.* The timing of the preceding events is approximate and can be modified at the discretion of the committee, *but not the two week minimum from scheduling to executing the oral exam.* It is only the oral exam that the Graduate School views as the actual qualifying exam and is therefore subject to their rules.

Example Time Schedule:

Friday September 23, 2005	Student presents all Committee members with written proposal
Friday September 30, 2004	Advisory Committee accepts written proposal as sufficient for the exam
Friday October 7, 2005	Advisory Committee submits questions to student's major professor
Monday October 10, 2005	Student takes written exam this week, one question per day
Monday October 17, 2005	Advisory Committee passes student on at least 3 questions
Tuesday October 18, 2005	Schedule Oral Exam with Graduate School
Tuesday November 1, 2005	Take the Oral Exam portion of Quals