

Updated 8/2009

STUDENT ASSESSMENT: NON COURSEWORK

The assessments are required to document the following aspects of the students:

- Research abilities
- Critical thinking
- Work ethic

Student requirements

- Satisfactory completion of courses
- Satisfactory progress in rotations
- Qualifying exam
- Satisfactory progress in seminars
- Satisfactory progress in committee meetings
- Preliminary exam
- Manuscript
- Dissertation

Written Documentation kept in Departmental Graduate Student Folder

- Rotations
- Seminars
- Committee meetings

Department faculty will meet at end of every year (summer) to discuss progress of all graduate students in the program based on written assessments and mentors' comments.

ROTATIONS

Minimal Expectations for Rotation

- 20+ hours a week for rotation
- Expected to be able to come in after hours/weekends to complete experiments
- Respect a schedule since you are working with other people
- Account for an absence – ie EMAIL
- Familiarize with publications assigned by the mentor
- Written assessment reports will be kept on file

Written assessments:

- When the student enters the laboratory, the mentor and student will agree on and write up reasonable goals.
- At end of rotation: the mentor together with student will agree on accomplishments and techniques achieved by student and to what level the goals were reached

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- At end of rotation: the mentor only will write a short assessment which addresses the following points:
 - Did the student put in reasonable effort at the lab – did he understand that it is not just a 9 – 5 job?
 - Did they grasp the techniques, understand why certain steps were done, purpose of controls, did they ask questions?
 - In general, is this student PhD potential or potentially PhD potential?
- At the end of the 2nd semester, department faculty will review the written assessments of the rotations. Unsatisfactory progress during the rotations can result in dismissal from the program.

COMMITTEE MEETINGS

Written requirement of Student:

- “Specific Aims” section of a NIH grant which includes a short introduction of subject area; significance of project; AIMS
- Short presentation of work accomplished. This is not necessary if the meeting immediately follows the seminar
- 6 month goals
- Applications toward potential publications

Written assessment by Mentor:

- Ability of student to present project
- Level of understanding of the project and methods
- Were 6 month goals satisfactorily completed or good effort made?
- New 6 month goals
- Potential toward publications
- The assessment is emailed to committee members for approval
- Assessment is shown to student; signed by mentor and student and sent to graduate advisor

If the committee believes that the student is not making good effort towards 6 month goals at two consecutive committee meetings, then this is sufficient reason for dismissal of the student from the MIP PhD program.

Seminar

Each student is required to present work in progress as a departmental seminar series once during each calendar year of enrollment.

- First year students are required to give a seminar presenting work from one of their rotations.
- Students are encouraged not to reschedule seminars; remember it is a work in progress
- Critiques of the seminar will be written by one student and one faculty member
- Critiques will be given to graduate advisor where they will be filed in student’s records
- Critiques will be given directly or via graduate advisor to mentor. The mentor will go over the critique with the student.

QUALIFYING EXAM (by end of first year)

- Instructions for qualifying exam are in a separate document.
- The students will not miss any laboratory time in preparation for this PART I exam since it is open book.
- The students may need extra preparatory time for PART II after they receive critiques from PART I. Therefore, their laboratory time may be reduced to a 40 h week during this period so they can study in the evenings.
- At the completion of the oral examination, the Qualifying Examination Committee will discuss student performance and determine if the student passed or failed.
- If the student passes, they are now a Ph.D. candidate.
- If the student fails, the committee may provide the option to retake the exam. If the committee does not provide the option to retake the exam, the student may continue in the program to obtain a MS degree. The option to re-take the exam after the completion of a MS degree may be provided after discussion with the mentor, department head, and exam committee.

PRELIMINARY EXAM (by end of third year)

- The exam is written in a NIH R21 format (12 – 15 pages of research plan)
 - Specific aims sections have already been approved and discussed at committee meetings. These should be the basis for the specific aims of the grant.
 - The student should have a strong understanding of the subject area and reading done by the end of the summer of their 2nd year.
 - The mentor and student can also decide on reasonable aims before the student formally begins writing his preliminary exam.
 - The mentor can read the first draft of the proposal, comment on grant organization and what may be missing from the proposal. For example,
 - Has the student included sufficient background material, experimental interpretations, potential outcomes, alternative experiments, potential pitfalls, timeline?
 - However, the mentor CANNOT comment on science or provide grants with or based on the same specific aims – this is what the student is being tested on.
 - All students will be given the same example(s) of RO1/R21 grants. The mentor can provide additional grants if they wish.
 - Instructions for writing a NIH grants can be found on the internet.
- The proposal is distributed to committee at least 2 weeks prior to exam date.
- The committee may want the student to prepare a short presentation that states specific aims and shows preliminary data. The student should determine this ahead of exam time with the committee.
- During the exam the student can be asked any questions pertinent to the written preliminary exam including basic biology, microbiology questions. Therefore, it is important that the student understands everything he/she has written including all the basis of all the methodology.